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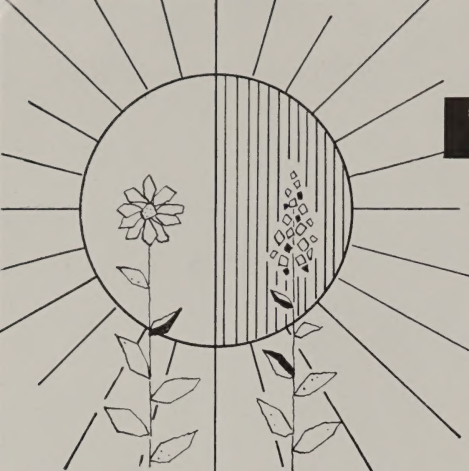
# Garden Annual

**GEO. KELLER & SONS CO.**

909 Maine St.  
Quincy, Ill.

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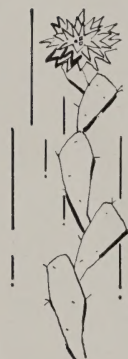
**LIGHT**

**SHADE**

## THE SUN

Sunlight is the prime requisite for all garden plants because, even with plenty of plant food and water, most plants will die without an adequate supply of sunlight. Most annual and perennial flowers need at least half a day of direct sunshine. Plants grow tall and spindly looking for sunshine they can never reach if they are planted in a shady spot.

There are a few, though, which do fairly well in the shade or with partial sun. The following are worth a trial in shady spots: **Bleeding Heart, Candytuft, Cleome, Coreopsis, Cornflower, English Daisy, Godetia, Larkspur, Lobelia, Lupine, Nasturtium, Nicotiana, Pansy or Vinca.**



**DRY**



**MOIST**

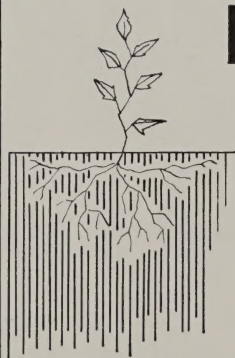
## THE RAIN

The first necessity in growing plants is water. Plants are made up for the most part of water—60 to 90%. Without water, no plant can live and grow. Any soil, under good drainage conditions will hold, when saturated, a definite amount of water, but when rainfall is inadequate it is necessary to provide this life-giving element.

In spots where the sun beats down all day long, many flowers will not prosper. But some will do well even in these difficult locations. A few you might try are: **Ageratum, Alyssum, Cosmos, Dianthus, Gaillardia, Marigold, Petunia, Annual Phlox, California Poppy, Portulaca, Salvia, Scabiosa and Zinnia.**



**SANDY**



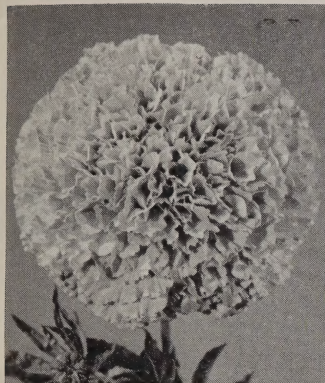
**HEAVY**

## THE SOIL

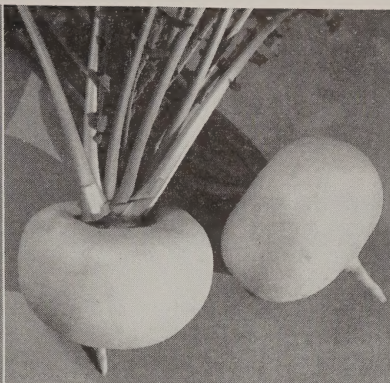
Soil consists of 2 important components. **Mineral soils** which are formed of decomposed mineral matter, and **muck or peat soils** which are derived from and contain large quantities of organic matter.

**Mineral soils** consist of mixtures of sand, silt and clay. Crop-producing of a soil more abundant in sand is increased by reducing acidity, adding deficient nutrients and increasing organic material. These coarse-textured soils are low in water holding capacity and for this reason are unproductive unless irrigated, even though nutrients are supplied in abundance.

**Muck soils** require application of large quantities of potash since they are notably deficient in potassium.



MARIGOLD, Toreador



TURNIP, Just Right

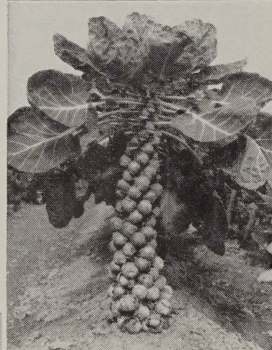
The new All-America Selections for 1960 include four flowers and two vegetables. Reading clockwise they are: **Toreador-Giant F<sub>1</sub> Hybrid Marigold** of bright orange, with an abundance of full double, giant flowers; **Just Right Turnip**, wonderful flavor; **Glamour-Giant Tetra Phlox**, a new annual phlox of a delightful salmon shade; **Vanguard Snapdragon**, Exceptionally long, tapered spikes of rich mid-rose double blossoms; **Jade Cross Brussels Sprouts**, earliest, most uniform and prolific of them all; **Spun Gold Marigold**, semi-dwarf, on compact bushy plants, light golden yellow and early flowering and **Rocket F<sub>1</sub> Hybrid Snapdragon**, Red, Orchid, Rose, Bronze, Golden and White. Quite heat resistant treated as a hardy annual.



SNAPDRAGON, Vanguard



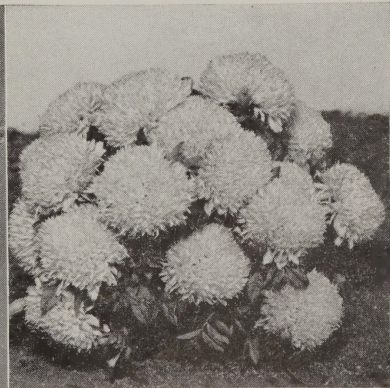
PHLOX, Glamour



BRUSSELS SPROUTS, Jade Cross



SNAPDRAGON, Rocket



MARIGOLD, Spun Gold



ALL AMERICAS



# GEO. KELLER & SONS CO.

909 Maine St.

Quincy, Ill.

## THE STORE WHERE GARDENS BEGIN

**H**AVE you ever noticed how people who garden are kinder, younger in heart and spirit; healthier—more broad-minded—more open hearted—in fact—just all-round nicer people!

Someone once said:

*"There is magic in the garden. I cannot create a daffodil in all its color and grace. No man can. I do not know how a daffodil is created. Yet each Spring thousands and thousands of them are seen dancing in our gardens. There is a law in the garden. It is the law of creation. If we follow that law we deal in magic. We cannot see the stuff of which the daffodil is made—we need not care by what process it comes into being. If we take that dark brown bulb, plant it according to that law at the right time—we achieve a miracle."*

Here at our store, we like gardeners. That's why we are in business. We want to help you have the most beautiful flower garden, the greenest lawn in town and the most delicious vegetables. And—we want your gardening to be fun.

Here in our Garden Annual we have selected the newest and most beautiful flowers, the best vegetable varieties and the best lawn seed mixtures for you.

You will find out what is best for your soil—what you need to know about sunlight—rain. Which flowers will give you the most colorful flower garden—how to get the best yields from your vegetable garden—how to have a beautiful green lawn.

If you believe in "Planting by the Moon," we've included the Moon Planting Guide. The growth habit, colors and blooming time of flowers are given so that you can plan your flower garden the way you want it to be. The Vegetable Planting Guide tells you all you need to know about planting for peak production.

You'll find a wealth of information in this little catalog, just as you'll find everything you need for your gardening pleasure at our store. We are here to help you have a good time gardening.

Come in and see us soon and—have fun gardening this year!

ZINNIA, Cupid



MARIGOLD, Glitters





MARIGOLD, Petite

DAISY, Gloriosa  
With Burpee White  
All Double PETUNIA



MARIGOLD, Red Head





## IT'S THE EARLY BIRD

Some weeks of garden beauty can be added by early plants when you start annuals in the house before freezing weather is over. The greatest gain in added beauty and color comes from flowers that grow slowly, taking as long as ninety days to bloom from seed. Most popular of these are petunias, snapdragons and asters. All the seed sown in boxes can be made to produce plants by transplanting the seedlings to other boxes while they are tiny. Each plant can then be exactly where it is needed more easily and accurately than where seed is sown direct. The boxes, too, can be more conveniently watered when necessary.

## THE BIG SEASON

Planning color in your garden for mid-season bloom could include Balsam, Celosia, Centaurea, Cynoglossum, Gerbera, Gomphrena, Gypsophila, Heliotrope, Larkspur, Lavatera, Lupine, Pansy, Petunia, Phlox (annual), Schizanthus, Sweet Pea. These flowers will bloom starting in June and continue in a riot of color through September. To keep them blooming, though, cut off flower heads to keep from going to seed and apply plenty of water.

Except for the slower germinating varieties, these can all be planted directly in the flower garden.

You can lengthen the season of bloom and make your garden a lovely spot during the hot summer months by carefully choosing colors from the wide selection of annuals.

## PLANT LATE TOO

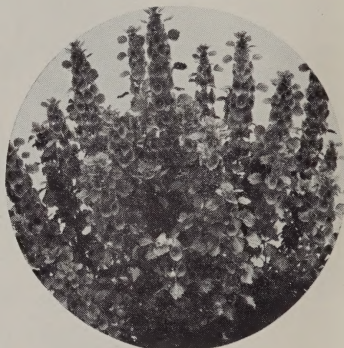
From mid-summer to frost, the most lavish display of colors come from annuals which are planted directly to the flower bed and, in some cases, successive plantings are made. For long bloom, be sure and cut off flower heads to prevent going to seed.

The choice for distinctive color of these long blooming flowers is wide. They include Ageratum, Alyssum, Anchusa (annual), Antirrhinum (Snapdragon), Asters, Calendula, Calliopsis, Candytuft (annual), Clarkia, Cosmos, Dianthus (annual), Didiscus, Four O'Clock, Gaillardia, Godetia, Hunnemannia, Linum, Lobelia, Marigold, Mignonette, Nasturtium, Nicotiana, Portulaca, Salvia Scabiosa, Sunflower, Verbena, Vinca, and Zinnia.

For beautiful Hollyhocks and Pansies, treat them as biennials. The plants are larger and the flowers more abundant if they are started in late summer and wintered over.



Get a head start on spring! Fill a shallow box with equal parts of sand, soil and peat moss or vermiculite. Sow seeds uniformly thick and cover with newspaper or glass. Keep moist. Thin and transplant when 2nd leaves appear.



Lovely midseason bloomers such as the Bells of Ireland (above) can either be started inside in a seed box or planted directly to the garden when the ground has warmed up. Some gardeners sow both ways for a succession of bloom all season.



Look ahead a season and start in the fall to grow plants of biennials and perennials which will be in their full glory next summer. The carnation shown above needs good winter protection to avoid kill, but it is most rewarding.





If petunia plants are started early indoors you can expect a spectacular show for several months. Petunias require little or no attention and go right on with their steady display of beauty. If you want a tremendous color range and fancy flowers as well, try Carnival Petunia, pictured above. As many as 20 different colors with many wavy, ruffled and fringed blooms.



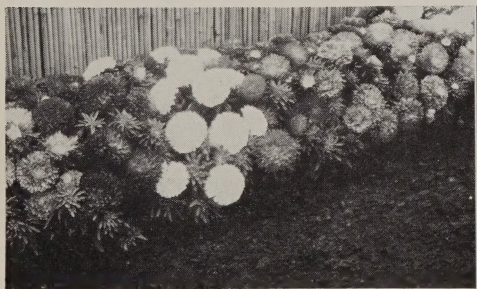
Another reward for starting seed early indoors is the new annual Sweet William, Wee Willie. This new and delightfully different strain is ultra dwarf and compact in habit, making it ideal for use as an edging plant. The single flowers, which are about  $\frac{3}{4}$  inch in diameter, are selfed, zoned and edged in gay combinations of crimson, ruby, deep rose pink and white. Plant is compact 4-6".



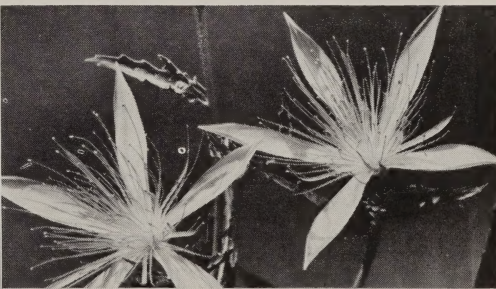
Marigolds and Zinnias are two of our most popular mid-season bloomers, going right into fall. These are really "Floral Twosomes"—they require about the same soil and climate and bloom about the same time—and they're both easy to grow, you can plant directly to the garden or start early indoors for longer show. Crackerjack Marigold, above, is a favorite variety.



Tom Thumb Zinnia (above) is a worthy companion to the Marigolds. You don't have to be in a hurry to get zinnias planted and don't bother to give them much in the way of fertilizer (they'll go to leaf if you do). When watering, let the hose run around the base of the plants. They can stand any amount of hot weather as long as there is a bit of moisture around the roots.



Little Queen Aster is a new dwarf Aster that has been bred from the famous Queen of the Market strain. Its dwarfness is in the plant as the flowers are good sized. The plants grow only 12 inches high and is most compact. The flowers are  $2\frac{1}{2}$  inches to 3 inches across. They literally cover the plants in lovely Aster colors of red, white, light blue, dark blue and rose.



Blooming in late August and September, Stella Polaris is a brand new variety of Blazing Star. This California wild-flower has star-shaped blooms 3 to 4 inches across.

**AND REPLANT**



# ANNUALS For Beauty



TITHONIA, Torch

ALL FLOWER SEED

15c

Per Packet

Unless Otherwise  
Noted



CELOSIA, Golden Fleece



DAHLIA, Unwin's  
Ideal Bedding  
Mixed

From among the thousands of seeds available, we have compiled a list of the very best flower varieties to give you a bright garden of color this year.

If you don't see the variety listed, ask us and we'll be happy to get it for you.

## CULTURE

The Culture Number shown for each variety refers to the "How to Grow" information which will be found on pages 22 and 23.

### Ageratum

(a) Culture I, 4-9"

**BLUE PERFECTION**—A deep amethyst blue flower. Grows to 9 inches high. 20c.

**MIDGET BLUE**—Small 4-inch plants are covered with azure blooms. Compact. 25c.

### Alyssum

(a) Culture II, 4-6"

**CARPET OF SNOW**—Easily grown dwarf annual. Fragrant snow white flowers last from early summer until frost.

**PINK HEATHER**—1959 All America. A soft lavender pink, about 6" tall with good spread of bloom until late September. 50c.

**ROYAL CARPET**—In drifts of vibrant purple color or used as a neat edging for the flower bed. 4" high, 10" across. 25c.

### Antirrhinum (Snapdragon)

(a) Culture I, 1 1/2-3"

Rust Proof

**MARDI GRAS**—Colors include white, light yellow, canary-yellow, gold, orange, copper, orange-scarlet, light pink, pink, rose-pink, brilliant rose, cream, scarlet, etc., plus bi-colors. Of extremely vigorous and uniform plant habit. Pkt. 25c.

**ROCKET**—All American 1960 Selection. Red, orchid, rose, bronze, golden and white. Bred especially to flourish in the hot summer. These F<sub>1</sub> hybrids produce masses of cut flower quality spikes. Rust resistant. 50c.

**VANGUARD**—All American 1960 selection. An F<sub>1</sub> hybrid of deep rose color with yellow lip marking and lightly doubled. \$1.00.

### Aster

(a) Culture II, 1 1/2-2 1/2"

**AMERICAN BRANCHING**—Four inch double flowers of compact form.

**COMET CREGO** Wilt Resistant — Large colorful flowers with fluffy effect.

**LITTLE QUEEN** — A new dwarf aster. Grows only 12" high, but flowers are 2 1/2" to 3" across. Lovely red, white, light blue, dark blue and rose flowers literally cover the plants. 25c.

**POWDERPUFF**—Pink, azure, rose, crimson, white, scarlet and blue. Solidly made of 3-3 1/2" fully-double flowers all on top. Often 20 long-stemmed cut flowers per plant. Highly wilt-resistant. Pkt. 25c.

**QUEEN OF THE MARKET**—Early. Short plants. Compact double flowers. Mixed. Marvelous colors. Wilt resistant.





CALLIOPSIS



CALENDULA, Chrysanthia

**RAINBOW**—An especially fine single flower for cutting and contains a range of color not to be found in other asters.

**WILT RESISTANT SUPER GIANT, MIXED**—An entirely new class of base branching, heavy stemmed fluffy ostrich feather flowers. 5-6" across. Pkt. 25c.

### Bachelor's Buttons

(a) Culture II or IV, 3'

**JUBILEE GEM**—Dwarf, 1' plant. Large, frosty blue blooms. All colors. Pkt. 20c.

### Balloon Vine (Love in a Puff)

(a) Culture I, 10' to 15'

A clear, free-growing vine with small white flowers, and balloon-like seeds.

### Balsam (Lady Slipper)

(a) Culture II, 1 1/2-2'

**CAMELLIA FLOWERED**—Double flowers all summer on bushy plants.



PANSIES, Swiss Giants



CELOSIA, Toreador

### Bells of Ireland

(a) Culture I, 24"

An interesting novelty with a long graceful stem. Both foliage and flowers are the same attractive light green color. Flowers practically cover the stem. 25c.

### Calendula (Pot Marigold)

(a) Culture II or IV, 1 1/2'

**FLAME BEAUTY**—An outstanding new orange of the Pacific Beauty strain. Flowers are large and graceful and heat resistant. 25c.

**PACIFIC BEAUTY**—Golden flowers with drooping petals. Odorless. Pkt. 20c.

### CANDYTUFT (Iberis)

(a) Culture III, 1'

**WHITE HYACINTH**—Large conical spikes of snowy flowers. Fine for edging. 20c.

### Celosia (Cockscomb)

(a) Culture I or II, 1-3'

**FOREST FIRE**—Low grower with large crested heads, as rooster combs. Pkt. 25c.

**GOLDEN FLEECE**—Plumes are huge and dense, on long cutting stems, dozens of them to the plant. Stands any amount of hot weather, pest and disease resistant. Will cut and come again all season. 25c.

**PAMPAS PLUMES**—Tall, feathery heads in new bronze and sunset shades. 25c.





CALENDULA, Flame Beauty

**TOREADOR**—A richer and brighter red than the earlier crimson colored cockscomb. Long blooming season, most compact, largest heads. Cristata type. 25c.

### Chrysanthemum (Annual)

(a) Culture II or IV, 2'  
**DOUBLE MIXED**—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shady spot. Pkt. 20c.

### Clarkia

**CHOICE MIXED**—Large double flowers.

### Cosmos

(a) Culture II or IV, 3-4'  
**FIESTA**—Bi-color. Orange colored with scarlet longitudinal stripes. Pkt. 25c.

**MANDARIN**—Strongly double orange flowers and lush green foliage. 25c.

**ORANGE RUFFLES**—Semi-double flowers. Golden orange. Airy effect. Pkt. 25c.

**RADIANCE**—Beautiful, deep rose flowers have a rich crimson zone in center. 25c.

**SENSATION MIXED**—Huge single flowers, wavy petals, many colors. Pkt. 25c.

### Cynoglossum

#### (Chinese Forget-Me-Not)

(a) Culture II, 15"  
**FIRMAMENT**—Hundreds of tiny indigo blue flowers. Resemble Forget-me-nots. Dwarf plants bloom all summer. Pkt. 25c.

### Didiscus (Blue Lace Flower)

(a) Culture I or II, 2½'  
**COERULEUS**—An attractive annual which blooms from July until frost. Flowers are pale lavender. Good cutting flower. 25c.

### Eschscholtzia

#### (California Poppy)

(a) Culture III, 1'  
Large single poppy-like flowers in many showy colors. Fern-like leaves.

### Everlasting Flowers

(a) Culture II, 1½-2'  
**MIXED**—Contains such favorites as Straw-flower and Globe Amaranth. Fine for dried winter bouquets.

### Four O'Clock (Mirabilis)

(a) Culture III, 2'  
Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in sun and open at 4 o'clock.

### Gaillardia (Blanket Flower)

(a) Culture II, (hp) VI, 2'  
**DOUBLE MIXED PICTA** (a)—Showy round flowers with tubular petals. 25c.

### Gomphrena

#### (Globe Amaranth)

**BUDDY**—A first rate bedding plant. Flowers shaped like red clover, but tighter and bright purple. 25c.

**CISSY**—White companion to Buddy. 25c.

### Gourds, Ornamental

(a) Culture III, 12'  
**MIXED**—Large and small kinds that will be useful for dried novelties. 15c.

### Helianthus (Sunflower)

(a) Culture II, 6'  
**SUN GOLD**—Large double flowers of a brilliant golden yellow.

### Hunnemannia

#### (Mexican Tulip Poppy)

(a) Culture III, 1½'  
**SUNLITE**—Soft yellow double poppy type flower. Bluish fine cut leaves. Pkt. 25c.

### Kochia (Burning Bush or Summer Cypress)

(a) Culture III, 2½'  
**CHILDSI**—Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedge. Turns bright red in fall.

### Larkspur

**WELCOME ALASKA**—A mixture of red, white and blue of the supreme type of Larkspur. 25c.

### Lavatera

**LOVELINESS**—Large bowl-shaped pink flowers shaded crimson on shrubby plants from midsummer until frost. 25c.

### Linum (Flowering Flax)

(a) Culture III, (hp), VI, 1-2'  
**SCARLET** (a)—Bright red flowers in a constant succession all summer. Pkt. 25c.

### Lobelia

(a) Culture I or V, 4"  
**CRYSTAL PALACE**—Compact border plant with myriads of tiny bright blue flowers. For all low use. Pkt. 25c.

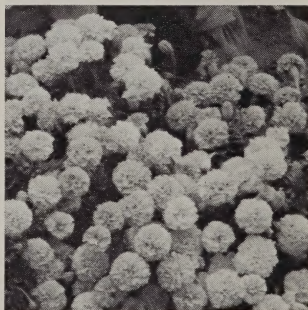
### Marigolds

(a) Culture I or II,

#### African

Tall Types, 2½-4'

**CRACKERJACK**—Full marigold range of colors, primrose, yellow, gold and orange. Turns out uniformly large, double flowers measuring 4 to 5 inches across. 25c.



MARIGOLD, Petite

**GLITTERS**—Clear yellow. Double. Bushy with long stem. A garden favorite. 25c.

**MAN-IN-THE-MOON**—The lightest of all yellow marigolds with exceptionally solid, round flower heads composed of broad, crisply ruffled, pale moon-yellow petals. Vigorous with strong stems. 25c.

**REAL GOLD**—Large carnation-like flowers in striking bright orange color. 25c.

**TOREADOR**—All America 1960 Bronze Medal Winner. Beautiful bright orange with an abundance of full double giant flowers on excellent cutting stems. 25c.



### Dwarf Chrysanthemum Flowered

**CUPID**—Mixed yellow, golden and orange. Quite early with odorless foliage. 25c.

**SPUN GOLD**—All American 1960 Selection. Semi-dwarf on compact bushy plants. Very early, with double mum flowers. Large, light golden yellow and much earlier than Cupid Gold. 50c.

### French

Double Dwarf Types,  $\frac{1}{2}$ -1'

**COLOR MAGIC**—12 inch mounds covered with variegated colored flowers. An unusual cross in French Marigolds. Flowers in combination of deep gold and red. 25c.

**YELLOW PYGMY**—Dwarf, compact plant covered with tiny, double orange yellow flowers. Pkt. 20c.

**LEMONDROP**—Clear lemon yellow of the miniature type. Profuse bloomer. Pkt. 20c.

**MELODY**—Foot high plants with loads of orange ball-like flowers. Pkt. 25c.

**RED HEAD**—Compact, with bright red, 2" blooms. Reddest of all. Pkt. 25c.

**PETITE, Orange, Gold Harmony**—Ideal edging plants. The little double crested flowers are all double and literally cover their plants with sheets of bloom. 25c.

Single Dwarf Types,  $\frac{1}{2}$ -1"

**NAUGHTY MARIETTA**—Open 2½" flowers are rich gold with maroon at base of petals. Fine for edging. Pkt. 25c.

### Morning Glory (Ipomea)

(a) Culture III, V or VII, 12'

**HEAVENLY BLUE**—Sky-blue flowers. Flowers close in bright sun. 20c.



NASTURTium, Golden Globe

Tall or Vine Kinds 3-10'

**GOLDEN GLEAM**—Large golden flowers. Double and fragrant. Pkt. 20c.

**SCARLET GLEAM**—Fiery orange scarlet flowers. Double and fragrant. Pkt. 20c.

**GLORIOUS GLEAM HYBRIDS**—A mixture of all the Gleam colors. Pkt. 15c.

deep rich colors, predominantly red and wine shades. Pkt. 75c.

**SWISS GIANTS**—Large flowering strain with fine range of gorgeous colors. Best of the improved pansies. 25c.

### Petunia

(a) Culture I or IV

Small Flowered, 10-14"

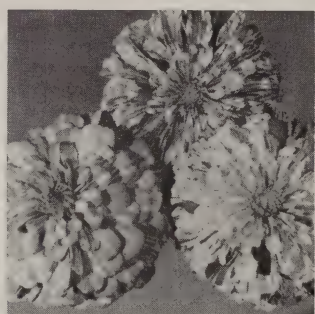
**BALCONY**—Trailing kinds for use in window boxes. White, red, rose, blue. 20c.



PETUNIA, Red Satin



ZINNIA, Pink Lady



ZINNIA, Ortho Polka

**PEARLY GATES**—A shining white form of Heavenly Blue. Pkt. 20c.

**SCARLETT O'HARA CLIMBING**—Large velvety scarlet flowers. Very Showy. 20c.

### Nasturtium

(a) Culture III or V

Dwarf or Bush Kinds 1'

**CHERRY ROSE**—Giant double, very sweet-scented. Rose flushed cherry. 20c.

**MAHOGANY GEM**—Deep velvet mahogany red double flowers. Pkt. 20c.

### Nicotiana (Flowering Tobacco)

(a) Culture I or II, 2-3'

**SENSATION**—Long-tube starry flowers. Fragrant at night. White, pink. 25c.

### Pansy

(a) Culture I, II or VIII, 8"

**COLOR CARNIVAL**—F<sub>2</sub> generation seed, possessing exceptionally large blooms on vigorous plants. The color range is remarkable, containing combinations of

**COMANCHE**—The reddest of red petunias, richer, brighter, more uniform scarlet red. Single flowers 2½ to 3¼ inches in diameter. About 13 inches high. 50c.

**ENGLISH VIOLET**—A fine purple-violet color. Spreading plant. Pkt. 25c.

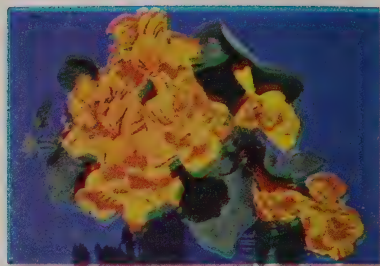
**GLITTERS**—The first real red and white bicolored introduction. It grows only 8 inches high, nana compacta type, an excellent and very showy dwarf bedder and edger. Pkt. 50c.





ASTERS, Super Giants

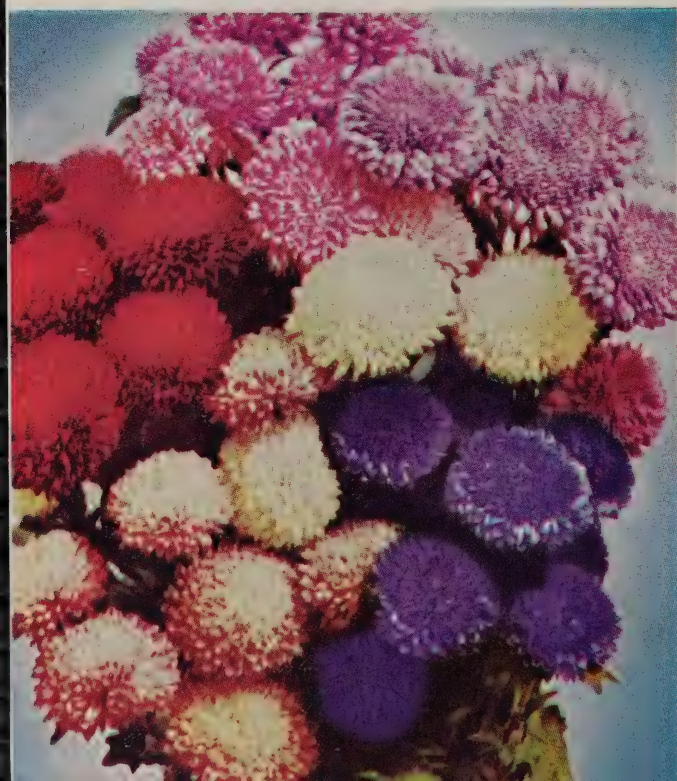
ASTER, Powderpuff



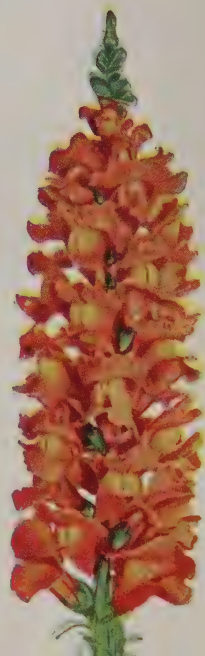
NASTURTIUM, Golden Gleam



HELIANTHUS, Sungold



ANTIRRHINUM  
Tetra







ALYSSUM, Royal Carpet

A low annual flower like alyssum is perfect material for enhancing the beauty of the flower bed in which you grow your bulbs. Alyssum is also a delightful plant to use between the tall, thin late or perennial flowers.



AQUILEGIA, McKana's Giants

Color schemes are up to the individual, but there should always be a climatic point and near it should be the best color combinations to build up its importance and to heighten the effect.

Colors must be blended, graded, focused and varied according to light and shade so as to supplement and strengthen the design of your garden—not only for a short period, but throughout the season.

Color accent groups along a border produce movement, sequence and rhythm. They carry the eye along to the climatic point. When these groups are repeated on both sides of the central point, they create balanced rhythm. Relieve large masses of color with smaller groups of plants of complementary color or by sparing use of creamy white.

There is no end to the various color combinations and there is no pleasure that can equal the painting of your own garden picture in a blaze of glory.



PETUNIA, La Paloma

A flower bed along a walk if possible, should face the north. So many flowers invariably face the sun that your view from the sunny side will always be more colorful than from the shady side.

## *Plant For a Blaze of Glory*



**HYBRIDA**—An F<sub>2</sub> blend of dwarf petunias which include the widest range of colors. The hybrid vigor of these petunias assures sturdy plants which bloom freely. Pkt. 25c.

**SILVER MEDAL**—A lovely salmon. Good size flowers on compact plants. 50c.

#### Large Flowered, 12-20"

**BALLERINA**—Bright. Deep rose fringed grandiflora type. Delicately fringed. 50c.

**CARNIVAL**—New strain of grandiflora Petunias that covers a much wider color range than ever before available. Large flowers produced in profusion on compact spreading plants. Very showy. Pkt. 25c.

**FIRE DANCE**—Exquisite new hybrid bedder, dwarf fringed grandiflora. Rich scarlet with a bold flash-light yellow throat. Pkt. 50c.

**FLAMING VELVET**—A velvety blood red. Best of its color. Grows profusely. 20c.

**GIANTS OF CALIFORNIA**—Huge flowers of many fine pastel tints. Pkt. 25c.

**LA PALOMA**—Pure white with a yellow throat. 100% grandiflora 3½ to 4 inches. Well fringed and extremely free flowering. Very uniform and vigorous, semi-dwarf and spreading which make it excellent for pot, bedding, boxes and borders. Pkt. 50c.

**LITTLE GIANTS MIXED**—Compact plants with medium flowers in many colors. 25c.

**MAYTIME**—An F<sub>1</sub> hybrid grandiflora fringed petunia. Light salmon pink and free flowering. Pkt. 50c.

**POPCORN**—Large, pure white, plain edged flowers. Early blooming, exceedingly dwarf and compact. Pkt. 50c.

**PRIMA DONNA**—Improved F<sub>1</sub> hybrid in the giant dwarf fringed grandiflora class. A bright rose-pink petunia excellent for home gardens. True large size and delightfully fringed, wavy petals on 12-inch bedding type plants. Pkt. 50c.

**RED SATIN**—Incredibly vivid and shining scarlet flowers. Blooms freely everywhere, and heat or sunshine will not fade the color of this F<sub>1</sub> hybrid. Pkt. 50c.

**THEODOSIA**—Large ruffled flowers of deep rose pink with golden throat. Very showy and lovely. Pkt. 25c.

### Phlox (Annual)

**TWINKLE**—Choice mixed colors, make a delightful bedding and edging subject. Growing only six inches high. Twinkle covers itself with a twinkling mass of star-shaped flowers. Pkt. 35c.

**GLAMOUR**—All America 1960 Selection. A tetraploid of mid-salmon with deeper salmon eye. Of uniform growth—12"-15" high with large flower size. 50c.

### Poppy

(a) Culture IV, 1½-3'

**SHIRLEY, MIXED**—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows.

### Portulaca (Moss Rose)

(a) Culture III or IV, 6"

**DOUBLE MIXED**—All double. Pkt. 20c.

**ROCK GARDEN VARIETIES** — Brilliant colors.

### Salvia (Flowering Sage)

(a) Culture I, 2-3'

**RED**—The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. 25c

**ST. JOHN'S FIRE**—Finest all-purpose salvia. Brilliant scarlet, blooms from mid-July until frost. Begins to flower when only a few inches high. Pkt. 35c.

### Salpiglossis (Painted Tongue)

(a) Culture III, 30"

**MIXED**—Large petunia-like flowers of rich velvety colors, veined with gold. 25c.

### Scabiosa

(a) Culture III or IV, 2'

**BLUE MOON**—Large double flowers of deep lavender blue. Pkt. 25c.

**CORAL MOON**—New coral shade. Large double flowers on firm stems. Pkt. 25c.

**IMPERIAL GIANTS, MIXED**—Large globe-shaped flowers in a wide range of red, white, coral rose and blue.

### Giant Schizanthus (Butterfly-Flower)

(a) Culture II or IV, 1½'

**ANGEL WINGS**—Small flowers shaped like multicolored butterflies. Delicate cut leaves. Free flowering, decorative. 25c.

### Sea Lavender (Statice)

(a) Culture I, 2'

**MIXED**—Small tubular flowers in colorful branching spikes. Decorative. Pkt. 25c.

### Snow-On-The-Mountain (Euphorbia)

(a) Culture III, 2'

Bright green foliage edged with white. Good for edging or contrast. Pkt. 25c.

### Stocks (Gilliflower)

(a) Culture I or IV, 1-2'

**DWARF TEN WEEKS**—Low growing with strong spikes. Many fine colors.

### Sweet Peas

(a) Culture III, 3'

**CUTHBERTSON**—Fine new heat resisting strain, very early, free flowering and fragrant. Scarlet, white, rose pink, navy blue, lavender and mid-blue.

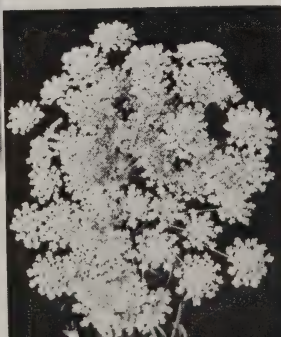
**LITTLE SWEETHEART**—Bred especially for the home gardener to use for borders, bedding or pot plant culture. Forms a perfect mound of flowers 8" high and wide. Flowers are of the Ruffled Spencer type in a full color range. Pkt. 35c.

**EARLY SPENCER**—Large fine flowers that flower in early summer. The standard ones for outdoor use. Colors mixed.



PETUNIA, Pink Satin

QUEEN ANNE'S LACE



PETUNIA, Carnival



### Sweet Sultan

(a) Culture II or IV, 2½'

**MIXED**—Lovely colorful thistle shaped flowers. Easily grown. 25c.

### Tithonia

#### (Golden Flower of the Incas)

(a) Culture I, 4'

**TORCH**—Blossoms from July until frost with quantities of long stemmed single flowers 3 to 4 inches across resembling single dahlias of intense fiery red. 25c.

### Verbena

(a) Culture I, 8"

**BLUE SHADES**—Medium and dark blues in mammoth type. Pkt. 20c.

**GRANDIFLORA MIXED**—Huge flower clusters, all colors. ideal for beds.

**LAVENDER GLORY**—Lavender with white eye. Large clusters. Fragrant. 20c.

**SCARLET**—Flaming scarlet heads. Brilliant in beds. Pkt. 20c.

### MIXED ANNUALS



MARIGOLD, Naughty Marietta



**ALL PRICES  
IN THIS CATALOG  
ARE SUBJECT TO CHANGE  
WITHOUT NOTICE**

### (Dwarf Medium Flowered)

**CUT AND COME AGAIN**—Fully double, well-rounded flowers. Ideal for cutting. All colors. Pkt. 15c.

**GOLD MEDAL FINEST MIXED**—All colors, with perfect color balance. 25c.



ZINNIA, Lilac Time

### Vinca (Periwinkle)

(a) Culture III, 15"

**LITTLE PINKIE**—New selection with dwarf habit of growth, half the height of regular vinca with identical rose colored flowers. 25c.

**MIXED**—Colorful starry flowers on glossy-leaved, bushy plants. Does well in shade and under most conditions.

### Wild Flower Mixture

(a) Culture II or III, ½-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers which will give a "wild" garden look.

### Zinnia

(a) Culture I or II

**Small Types, 18-2"**

**CUPID**—Dwarf, compact little plants bearing quantities of button flowers. full color mixture. 25c.

**RED RIDING HOOD**—Deep scarlet flowers 1" across. Free flowering. Fine border plant of Lilliput type. 20c.

**PERSIAN CARPET**—Bi-colored. Rich deep tones of red and gold along with sunset shades. Medium-sized blooms on good cutting stems. 20c.

**IMPROVED LILLIPUT**—Lovely soft colors in the miniature strain. Fine for borders or small bouquets.

**TOM THUMB MIXED**—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays. Pkt. 25c.

**PEPPERMINT STICK**—Bi-colored. Basic red flowers, white or yellow stripes. 15c.

**Large Types, 2-2½'**

**BLAZE**—Giant hybrid, fiery red and orange. True to color and flowers are bigger than most zinnias. Pkt. 25c.

**LILAC TIME**—The first lavender zinnia in the giant hybrid cactus flowered family. An excellent flower for mass color in the garden. 25c.

**ORTHO POLKA**—A giant bloom of the Peppermint stick coloring. Colors in this bright mixture include combinations of pink and white, red and white, lavender and white, purple and white, scarlet and yellow, etc. Pkt. 25c.

**PINK LADY**—A bi-color with the center of the flower a strong pink. As the petal expands the pink softens to a more delicate shade and blends into a buff color with shrimp undertones. Pkt. 25c.

**SUPER CROWN O'GOLD**—Large well-formed flowers in rich pastel shades, each petal overlaid at the base with deep golden yellow. 25c.

**SUPER GIANTS**—Extremely large, deep fluffy or loose-petaled flowers in a full color mixture. 25c.



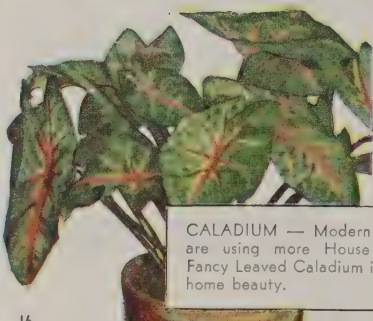
# Bulbs and Tubers



POMPOM DAHLIAS



DOUBLE PEONIES



CALADIUM — Modern decorators are using more House Plants and Fancy Leaved Caladium is perfect for home beauty.

## DAHLIAS

**A. D. LIVONI**—(Show Type) Beautiful shade of deep pink. Free flowering and ideal for cutting.

**ARTHUR GODFREY**—(F. D.) Flame red with orange-buff shadings. Large.

**AVALON** (F. D.)—Profuse bloomer with rich large lemon-yellow blooms. **BLACK MONARCH**—Very dark, oxblood red. A strong grower with many blooms. Long, sturdy stems make this a fine cutflower.

**CITY OF CLEVELAND** (F. D.)—Glowing orange with suffusions of red showing through. The formal flowers are borne on a strong sturdy bush.

**CLARA CARDER**—(I. D.)—A beautiful medium size flower of cyclamen pink.

**COMANDO**—(I. D.)—Clear shade of deep lavender. One of the finest.

**GALLANT FOX** (I. D.)—Brilliant red. A good cutflower variety.

**GOLDEN LEADER** (F. D.)—Golden yellow, large flowering.

**JANE COWL** (I. D.)—Blend of bronze, buff and gold. Strikingly beautiful.

**JERSEY SHADE** (F. D.)—Pink shaded with chamois. Flowers large and well formed.

**KINDIG PURPLE** (F. D.)—A wonderful plant with deep green foliage setting off the richness of the giant deep purple flower.

**MICHIGAN WHITE**—Clear white. A beautiful cutting variety with 6 inch blooms.

**MRS. GEO. LE BOUTELLIERE** (I. D.)—Deep rich carmine red. Very attractive.

**MRS. THOMAS EDISON** (I. D.)—Dark claret red on a medium low bush.

**ROSE GLORY** (F. D.)—Large, deep old rose on good stems. Fine keeper.

**ROSY DAWN** (Ball Type)—Rose red and yellow. Fine for cut flower.

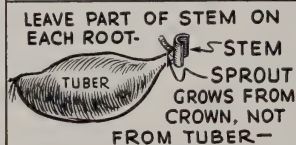
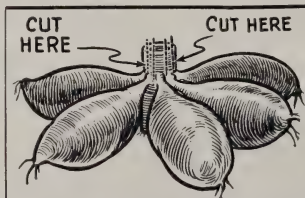
**ROYAL PENNANT** (I. D.)—Rich royal purple with eight inch blooms.

**SALEM SUNSHINE** (I. D.)—Primrose yellow blooms, measuring up to 10 inches across.

**POMPON DAHLIAS**—Charming "button" dahlias that require little care.

**MINIATURE DAHLIAS**—Lovely 3 to 4 inch blossoms just like the larger

## To Divide Dahlia Roots



Dahlias can be grown easily and successfully with only a little care. Drainage and porosity are important and fertilization should be done with a good balanced commercial fertilizer.

Planting is simple. Set stout stalks first, then plant the tuber in a hole 6 inches deep, with the eye up and neck near the stake. As the eye grows, keep filling in the soil.

Cultivate frequently for the first 10 weeks, but do not cultivate when in bud or bloom.

Caladiums with their showy leaves are excellent pot plants and unusually suitable plants for bedding in sun or shade. They are available in numerous varieties with beautiful colors.





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GLADIOLUS, Emperor, Appleblossom, Royal Stewart, Maytime and Caribbean. AAGS

## GLADIOLI

**APPLE BLOSSOM**—A beautiful white with lushly suffused rich pink petal margins and a prolific propagator.

**BAGDAD**—Smoky old rose, deeper at edge of throat.

**COL. W. C. ATKINSON**—80 to 85 days. Excellent lavender of a deeper shade than any other lavender variety.

**ELIZABETH THE QUEEN**—Large mauve-ruffled flowers with dark lines in the throat. The best beautiful lavender.

**ELMER'S ROSE**—85 days. Deep rose, heavily ruffled. Opens 7 to 8 well placed blooms on a 20 bud spike.

**EMPEROR**—A robust grower, royal purple with light throat. A rich, distinctive color. Makes majestic spikes that grow very tall. AAGS 1958.

**FLORENCE NIGHTINGALE**—Crystal clear white shading into a light cream throat. Opens up to 8 beautifully ruffled florets on a well balanced flowerhead.

**FRIENDSHIP**—A superbly colored soft light pink, blending to a cream throat. Opens 6 to 8 ruffled florets on a straight medium height spike. Excellent placement, and one of the earliest to bloom.

**JOYOUS**—Medium rose, lighter in the throat. Large size with a crisp, ruffled formal spike. AAGS 1959.

**J. V. KONYENBURG**—Vermillion red. Well placed flowers on tall stem.

**KING DAVID**—80 to 85 days. Deep purple with a garnet flush on the lower petals to add a touch of color, with nice ruffling. Spikes are tall, well balanced and the six to eight florets open at one time.

**LANDMARK**—A real eye-stopper. Huge, tall, cream colored with lovely ruffled florets.

**LEADING LADY**—Cream white. Very large florets on tall spikes.

**LEEUEWENHORST**—Huge flowers of light rose tinted lavender. One of the strongest growers and largest flowers.

**LITTLE PANSY**—A petite and charming little gladiolus of rich, velvety, deep blue. Pansy-like blotches make it a study in contrasts.

**MANSOER**—Glistening blood-red with velvety texture. Mid-season variety producing 5-7 open florets at a time.

**MARGARET BEATON**—Huge snowy white florets with a small red blotch deep in throat.

**MARGARET FULTON**—Clear rich dark salmon pink. Throat apricot pink.

**MAYTIME**—A real stunning pink with white throat. Delightful for arrangements. Ruffled and healthy. Remarkably easy to grow. AAGS 1957.

**ORANGE GOLD**—Clear orange self color. Opens up 6 well placed florets on a tall spike.

**PACTOLUS**—85 to 90 days. Spectacular, deep apricot-cream with brilliant orange red blotches. Opens 8 to 10 well attached blooms in perfect placement.

**PICARDY**—Soft shrimp pink. Blotch of flesh pink shading to shrimp pink edges.

**RED CHARM**—One of the finest medium reds, opening 8 to 9 large well placed florets on tall straight stem.

**SANS SOUCI**—85 days. Tall, strong clear scarlet with a narrow white line on the lower petal. Seven to eight five inch blooms open at once.

**SHERWOOD**—Beautiful ruffled deep purple with darker blotch in the throat. Tall grower.

**SNOW PRINCESS**—Tall white with long flower spike and many open blooms that are always perfectly placed. Mid-season.

**SPARKLER**—"Butterfly" informal type, pale yellow with a scarlet throat. Medium size. AAGS 1959.

**SPIC AND SPAN**—Tall ruffled deep pink. Salmon shading. Quite tall. Strong.

**YELLOW HERALD**—Amber yellow with carmine in throat.

## CANNAS

**Apricot**—Large shell pink flowers; green foliage; extremely dwarf.

**President**—Immense bright red flowers in large clusters. Green foliage. Height 4 feet.

**Richard Wallace**—Beautiful large clear light yellow flowers, green foliage; dwarf.

**Red King Humbert**—Large light red flowers; bronze foliage; medium tall.



Landmark (top), Little Pansy (bottom)  
1960 AAGS

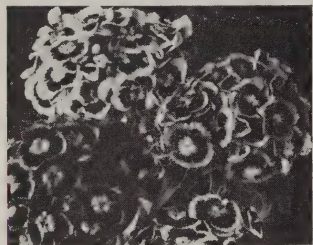


# Perennials

## YEAR ROUND FLOWERS



AQUILEGIA, (Columbine)



SWEET WILLIAM



DELPHINIUM, Giant Pacific Hybrid

### Alyssum

(hp) Culture VI, 1'

**SAXATILE (Gold Dust)**—Hardy, compact growth. Produces golden yellow flowers.

### Aquilegia (Columbine)

(hp) Culture VI, 2½'

**McKANA'S GIANTS**—Larger flowers and longer spurs, as well as richer and more beautiful colors than other columbines. Three feet in height and the striking terminal flowers are on wiry stems. 50c.

### Arabis (Rock Cress)

(hp) Culture VI, 6"

Creeping plants with small flowers in early spring. Fine for edging. Pkt. 25c.

### Armeria (Thrift)

(Sea Pink)

(hp) Culture VI, 3"

Dwarf rock plants with grassy foliage and has dense globular flowerheads. 25c.

### Aubrietia (Purple Rock Cress)

(hp) Culture VI, 6"

A creeper with large colorful flowers in spring. Ideal with bulbs. Purple shade.

### Campanula (Canterbury Bells)

(b) Culture VIII, 2'

**CUP AND SAUCER**—Bell-shaped. Saucer of petals at base. Mixed colors. 25c.



DAISY, Shasta

**SINGLE**—Large bell-shaped flowers in many colors. Graceful plants.

### Candytuft (Iberis)

(hp) Culture VI, 1'

**PERENNIAL GIBALTARICA**—Lilac-pink blooms. Needs protection in the winter. Prefers hot, dry location. 25c.

**SEMPERVIRENS**—The perennial white Candytuft. Most desirable perennial for borders, rock gardens. Is evergreen. 25c.

### Carnation

(hp) Culture or VI, 18"

**CHABAUD'S GIANTS**—Large double flowers with sweet fragrance. All colors. Flower in six months. Profuse bloomers.

### Coreopsis

(hp) Culture VI, 2'

**SUNBURST**—Large, double flowers of rich golden color. Fine for cutting. Sturdy, good grower and dependable.

### Dahlia

(hp) Culture I or II, 14"

**UNWIN'S IDEAL BEDDING**—Semi-double flowers on low bushes. Fine for beds or borders. Many colors. 25c.

### Daisy, English (Bellis Perennis)

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. Ideal flower for beds, 20c.

### Delphinium (Perennial Larkspur)

(hp) Culture VI, 5'

**GIANT PACIFIC HYBRIDS**—World famous strain of immense double flowers on tall stems. Colorful. Blooms June. 25c.

### Dianthus (Pinks)

(p) Culture I, 1'

**DOUBLE AND SINGLE MIXED**—Fine mixture of colorful, scented pinks.

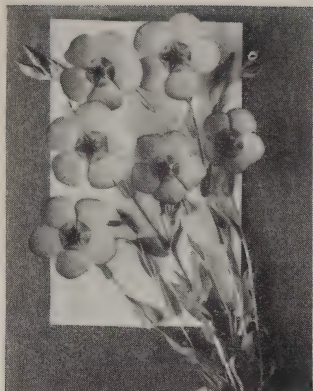
### Foxglove (Digitalis)

(b) Culture VII, 3'

**PERENNIAL MONARCH MIXED (hp)**—Superb daisy type flowers in shades of red and yellow. 1½ to 2 feet high. 25c.

### Gypsophila (Baby's Breath)

**PERENNIAL WHITE (hp)**—Large loose clusters of small flowers give misty effect. Excellent for cutting. 1½-3 tall. 25c.



**LINUM**, Perennial Blue

### **Hibiscus (Rose Mallow)**

(hp) Culture VI, 4'

**GIANT MIXED**—Huge bell-shaped flowers in white, pink, red. Tall plant. 25c.

### **Hollyhock**

(hp) Culture VI or VIII, 5'

**DOUBLE, MIXED**—Large double flowers on tall spikes. Bloom in midsummer.

### **Linum (Flowering Flax)**

(hp) Culture VI, 6"-8"

**PERENNIAL BLUE**—Low bushy plant blooming from spring to midsummer. Small, clear blue flowers. Pkt. 15c.

### **Lupine**

(hp) Culture III or VII, 3'

**PASTEL PIXIE DWARF**—More dwarf and compact. Colors include rosy-white, white, pink, lilac, blue shades, and bi-colors of these. They make a delightful pastel display in the garden. 25c.

**RUSSELL'S MIXED**—Finest of all the lupines. Brilliant colors in long, strong spikes symmetrical closely packed. 20c.

### **Phlox**

(hp) Culture VI, 8-12"

**DWARF MIXED**—The finest large flowered Dwarf Phlox. The shades are clear and soft. Blue, Pink and White. Pkt. 25c.

**GIGANTEA ART SHADES**—A strain with flowers 1½" in diameter, in a remarkable variety of soft color tones. Pkt. 25c.

### **Poppy**

(hp) Culture VI, 1½-2'

**ICELAND MIXED**—Excellent perennial for borders, rock gardens. Large colorful, ferny foliage. Neat compact tufts. 20c.

**ORIENTAL SCARLET**—Huge red blooms in early summer from perennial root. Useful for bold color. Flower profusely. 20c.

### **All Flower Seeds**

**15c**

**per packet**

**Unless otherwise noted**

Beds and borders of these beautiful flowers form perfect back-grounds for all gardens. They are the encouragement of the beginner, returning in beauty each year and are the stay of the gardeners who work in design.

While it is possible to start the seeds in the location you intend for them in your garden, it is generally better to prepare a small nursery bed in a spot where you can give them special care as seedlings, transplanting the started plants in their permanent location in the fall early enough to give them a chance to get established before cold weather begins.

You can plant seed of perennials in midsummer or later, but it is better to sow the seed earlier. This will give the plants an opportunity to acquire greater strength for wintering over and in many cases will result in a larger number of flowers next year.

In the years to come, after the plants have grown to such a size as to be choked with their own growth, it is good practice to divide the clumps and transplant to keep them growing actively.

Some of the popular hardy perennials you can start from seed for beautiful permanent places in the garden are:

**Alyssum Saxatile**—loads of bright yellow flowers in the spring. Excellent for rock gardens.

**Aquilegia (Columbine)**—unique, long-spurred flowers in many colors.

**Candytuft Sempervirens**—low growing mounds of white.

**Carnations**—Chabaud's are the largest flowered.

**Shasta Daisies**—either single or double flowered.

**Dahlias**—a surprising number of types and colors can be grown from seed and the bulbs saved each year.

**Delphiniums**—big, impressive and beautiful.

**Geum**—comes in both scarlet and yellow.

**Gypsophila (Baby's Breath)**—airy and graceful. Beautiful in mixed bouquets.

**Poppy**—both Iceland and Oriental are perennials.

**Tritoma (Red Hot Poker)**—spectacular spikes. Biennials bloom for only one year and take a year to start, but they are well worth the trouble.

**Foxglove (Digitalis)**—with tremendous spikes of intricately speckled, closely-placed hanging florets.

**Canterbury Bells (Campanula)**—with nodding pink and white bells.

### **Primula (Primrose)**

(hp) Culture VI, 6-10"

**ENGLISH PRIMROSE (Vulgaris)**—Creamy yellow. 6-10" high. Pkt. 25c.

### **Shasta Daisy**

(hp) Culture VI, 2'

**ALASKA**—Largest of the Shasta strains. Big, white flowers yellow centers. 25c.

### **Sweet William (Dianthus Barbatus)**

(hp) Culture VI, 1½-2'

**DOUBLE DWARF MIXED**—Lovely single pinks in large flat clusters. Fine for cutting. 1½-2'. 25c.

### **Tritoma (Red Hot Poker)**

(p) Culture VI, 3-4'

**CHOICE HYBRIDS**—Narrow tubular flower on tall spikes, orange red. Graceful greasy foliage. Not perennial under some conditions. For border. 25c.



**PHLOX**, Gigantea Art Shades



## KNOW WHATS NEW IN

# Grass

## BEAUTIFUL LAWNS ARE MADE

The most important step in building a beautiful lawn is the selection of the proper seed to suit special conditions. We have seed selected to grow in sunny spots, shady lots or for special needs, such as playground areas which receive hard usage.

Cheap lawn seed is no bargain. It's the kind of seed and the proportions of mixture that count in determining a lawn seed value for you.

### THE NEW LAWN

If you are building a new lawn, it requires exacting preparation and subsequent care. Spade or plow the area to an 8 to 10 inch depth. Pulverize the soil thoroughly. Have the soil tested to see if addition of lime is necessary and how much. Prepare the seedbed several weeks in advance so that it will have time to settle. Smooth down the surface to finished levels with a steel rake.

### PLANT FOOD IS NECESSARY

Apply a complete plant food and any necessary lime and mix them with the top six inches of soil by digging in at least a week before sowing. Be sure to apply evenly in order to avoid any spottiness when the grass comes up. To avoid weeds, work in peat moss, about a bale to each 1,000 square feet. Spread top soil, rake well and remove all stones and heavy clods of earth. The seedbeds should be smooth. Take care to spread all fertilizers uniformly over the seedbed surface.

### BROADCAST THE SEED

The easiest way to sow seed on small lawns is to broadcast it



preferably in the morning of a still day. Sow plenty of seed, at least 3 pounds to each 1,000 square feet, but don't sow it too thickly. Sow half the seed lengthwise and half crosswise. This insures proper distribution of the lawn seed. If the soil has been rolled or is packed hard by rains, go over it again with a steel rake before sowing.

### WATER GENTLY BUT THOROUGHLY

Water thoroughly with a fine spray. Continue to water daily until seed germination is complete—three to four weeks—then water as needed, but always water thoroughly. Light sprinkling encourages shallow roots. During a drought, lawns are very often injured from lack of moisture in the soil. Proper artificial watering is essential at this time. Soak well to a depth of 4 to 6 inches. Early morning is best for watering.

### ROLLING IS IMPORTANT

Roll your lawn to imbed seed and insure perfect contact between seed and soil. This is a very important step in establishing a good lawn. A tamper or wide board can be used on small areas when a roller is not available. This is a very important feature of lawn care and should not be neglected. Clay soils require less rolling and should be rolled with a lighter weight roller than others.

### WATCH THAT MOWING HEIGHT

Mowing the new lawn should be carefully done. Put your mower to about 2 inches high, and in shady areas raise this to 2½ to 3 inches. Established lawns do best if mower is kept to 1½ inches, especially in hot, dry weather. Cut frequently enough so that the clippings are not too long to remain on the turf.



The only way to win a thick, lasting turf is to sow a mixture of true turf grasses suited to your own soil and climatic conditions. The only sure way to get such a mixture is to depend on a seed specialist. That's us!

In addition to the best in grass seed, your lawn will need intelligent care in applying the right fertilizer at the proper time, in using the best weed controls to keep out undesirable growth, and in getting the best tools for cutting, raking, edging, watering and all other operation in maintaining your lawn. Make our store your headquarters for all of the tools and supplies needed to make and maintain a beautiful green lawn. Come in and see us soon.

#### GET RID OF THOSE WEEDS

At the first sign of weeds, spray with one of our selected weed killers. Get them before they get big, since young weeds are easiest to kill and the weeds take away life-giving nutrients from the young grass and crowd it out. When given an opportunity for vigorous growth, turf grasses offer very severe competition to weeds for the space, moisture and nutrients. Weed controls start in the very early spring.

#### CONTROL INSECT DAMAGE

Japanese beetle grubs attack lawns in the spring, cutting the roots. Spray or dust your lawn with one of our selected insect killers. A vigorous turf with strong root systems is a vital part of the program of fighting insects. Earthworm injury consists primarily in the casts which worms leave at the lawn surface, thereby making the surface bumpy. Use arsenate of lead for the most satisfactory control and use as directed for white grubs.

#### Winter Rye Grass

Use for temporary plantings of winter lawns to provide a luxuriant green turf, or for over-planting over winter-dormant grasses.

#### Red Top

Perennial grass with a creeping growth habit making a coarse, loose turf. Tolerates acid soils, wet land, sour land and is drought resistant. Primarily used as a nurse grass in seed mixtures.

#### Centipede Grass

The popular grass for poor, dry soils in the middle and lower South. Good for full sun to semi-shade. Very flat growing, medium coarse texture grass that requires little mowing.

#### St. Augustine

Stands the heaviest shade to full sunny areas. Coarse, broad leaves, but makes a pleasing, thick, dense turf that crowds out weeds. Needs rich soil and ample moisture.

#### Fescue Kentucky 31

Deep-rooted perennial grass with shiny, smooth, broad, slightly barbed leaves. Grows well on wet, poorly drained land, yet produces equally as well on dry upland soils. Has but a very short dormant period, for once established is drought resistant.

#### Kentucky Blue Grass

One of the most popular lawn grasses for the middle and upper South, thriving in sunny to semi-shaded areas. Leaves a pleasing dark green color and fine texture. One of the main perennial grasses, growing best in well-prepared, limed soils. Requires about 2 years to become well established, and is a slow germinator.

#### Merion Kentucky Blue Grass

Forms a dense, dark green turf that experts say chokes out crabgrass. Is resistant to leaf spot and tolerates closer mowing than ordinary Blue Grass. Is considerably more resistant to heat and drought and establishes itself more quickly than common Blue Grass.

#### Chewings Fescue

A fine textured grass for medium to heavily shaded areas, acid and poor soils. Spreads by development of new shoots, a single plant often covering an area several feet in diameter.

#### Creeping Red Fescue

Produces turf similar to Chewings Fescue, but spreads by underground runners that make an excellent tight, uniform sod. Thrives on all types of soil. Excellent for shady places and withstands wear.

#### Poa Trivialis

Often called the "Blue Grass of the Shade"—the leaves are narrow, soft and glossy. Has a creeping habit and is particularly adapted for heavily shaded areas. Needs good moisture and lime.

# GEO. KELLER & SONS CO.

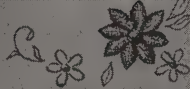
909 Maine St.

Quincy, Ill.



# FLOWER

## PLANTING GUIDE



# FLOWER

**KEY**—For classification of flowers by purpose, location, etc., see the second column below.

A—For dry, hot locations.  
B—For a succession of blooms.  
C—For shady locations.  
D—For poor soil.

E—For edging.  
F—For the rock garden.  
G—For their foliage.  
H—Everlasting for winter bouquets.

I—For their fragrance.  
J—For porch or window boxes.  
K—Climbing vines.  
L—For backgrounds.

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	EFJ	5-10	10 Wks.	bushy
Alyssum, Sweet	2-12	BCDEFIJ	5-10	6 Wks.	spreading
Antirrhinum	12-60	CIL	20-25	3-4 Mos.	bushy
Aquilegia	18-36	CEF	15	3 Mos.	branchy
Balsam	14-20	AE	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Campanula	18-24	F	8-15	10-12 Wks.	bushy
Candytuft	6-18	BFI	5-10	8-10 Wks.	bushy
Centaurea	18-36	ABCDEIJ	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	AE	5-20	8-10 Wks.	bushy
Celosia	12-36	DEH	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	ABD	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Digitalis	30-48	F	10-20	3-4 Mos.	erect
Dianthus	4-15	CFI	5-10	12 Wks.	bushy
Eschscholtzia	10-12	CD F	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	AD	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy
Godetia	12-24	CD	15-20	2 Mos.	erect
Gypsophila	18-36	BH	15-20	8-10 Wks.	branching
Helichrysum	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Kochia	30-36	AB	15-18	Foliage	bushy
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	IK	25-40	2-3 Mos.	vine
Lobelia	4-8	EJ	10	10-12 Wks.	bushy
Marigold	8-36	BJ	5-8	6-8 Wks.	bushy
Mignonette	10-12	BI		3-4 Mos.	erect
Moon Flower	12 ft. or more	IK	5-8	4-5 Mos.	vine
Morning Glory	12 ft. or more	AK	5-8	3-4 Mos.	vine
Nasturtium	12-36	DE FK	8-15	2-3 Mos.	bush-vine
Nigella	10-18	BF	10-15	10-12 Wks.	bushy
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	CEF	10-15	10-12 Wks.	clump
Petunia	10-24	DEFJ	18-20	10-12 Wks.	bushy
Phlox	10-18	ABCFIJ	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	ADEFJ	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy
Stocks	12-24	I	5-15	12-14 Wks.	bushy
Schizanthus	18-36	CE	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 Wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	EFJ	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	AF	5-10	6-8 Wks.	bushy

The numbers I to VII, found with flower listing refer to the following cultural notes which give directions for growing all the flowers we list.

### Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

### Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for most of the summer. If wanted especially early, they should be started as directed indoors in seed beds or flats. Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants. Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in uncovered. Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to the garden.

### Culture III

These flowers do not transplant well. They should be planted where they are to bloom. Sow as soon as the weather begins to warm in the spring. *Otherwise the culture is the same as II.* Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in *Culture I/III*.

### Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in the fall, they should be planted as early in the spring as possible. Fall sowing gets the seedling job out of the way before the spring rush.

### Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. *For garden use, handle as in Culture II.* For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

### Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or shel-

tered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat moss. This prevents packing of the soil over the seeds. Always water with a fine spray. As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, *Culture I* may be used. Delphinium seed is often started in August to take advantage of the cooler nights for the seed will not grow when the soil temperature is above 77 degrees.

## Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. *Otherwise Culture is the same as I.* The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat moss or vermiculite. Be sure to keep this material moist or it will draw moisture from the pots.

## Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year, then die. This means that a continuing show from biennials must be provided by starting new plants every year to replace ones flowering. Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store food for the next year's bloom.

Pansies are tender perennials that are treated as annuals or biennials. When grown as annuals, they should be started indoors about six weeks before time for planting out in early spring. When grown as biennials, the seed is started in late summer and the plants carried over winter in protected spots where extreme temperature and moisture are avoided. Mulching or the use of frames may be necessary in your particular garden. Pansies do best under conditions of constant, moderate moisture, partial shade and a humus-rich soil. Pinching off old flowers will prolong the flowering season.

KEY—For "Time to Plant" in fifth column below.

A—As soon as soil can be worked.

B—Two weeks before last spring frost.

C—Week before last spring frost.

D—After all danger of frost.

E—When danger of hard freeze is over.

F—In time to allow maturity before freeze.

	Seed Needed for 50 ft. of row	Space Between Rows (inches)	Space Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row
Artichoke	1/8 oz.	48	48	1/4	A			
Asparagus	1/2 oz.	24	20	1/2	A	2-3 yr.	4-5 wk.	25 lbs.
Beans, Bush	1/2 lb.	24	4	1 1/2	C	50-70	4-5 wk.	20 qts.
Beans, Lima	1/2 lb.	24	3	1	C	60-90	3-4 wk.	32 qts.
Beans, Pole	1/2 lb.	36	8	1 1/2	C	60-90	6-8 wk.	30 qts.
Beans, Pole Lima	1/2 lb.	48	8	1 1/2	C	88	3-4 wk.	1 1/4 bu.
Beets	1/2 oz.	24	3	1/2	A	55-100	4-6 wk.	1 1/4 bu.
Broccoli	1/8 oz.	24	24	1/2	A	80-120	8-10 wk.	25 head
Brussels Sprouts	1/8 oz.	24	18	1/2	A	70-110	6-8 wk.	15 qts.
Cabbage	1/4 oz.	24	12-24	1/2	A	75-130	4-6 wk.	35 head
Chinese Cabbage	1/2 oz.	24	12	1/2	F	75-85	4-6 wk.	40 head
Carrots	1/4 oz.	16	3	1/2	A-F	65-85	6-8 wk.	24 qts.
Cauliflower	1/4 oz.	24	20	1/2	A-F	65-90	1-2 wk.	25 head
Celery	1/8 oz.	24	6	1/4	E	100-140	6-8 wk.	100 stalk
Collards	1/4 oz.	30	18	1/2	F	24-36	until fall	3 bu.
Corn, Sweet	4 oz.	36	9	1	B	65-100	1-2 wk.	100 ears
Corn, Pop	3 oz.	34	8	1	B	115		
Cucumber	1/2 oz.	48	36	1/2	D	60-100	4-6 wk.	100 fruit
Eggplant	1/8 oz.	36	24	1/2	D	110-150	until fall	75 fruit
Endive	1/2 oz.	18	12	1/2	A	80-100	3-4 wk.	50 head
Kale	1/2 oz.	32	22	1/2	A-F	70-100	until fall	50 plants
Kohlrabi	1/4 oz.	24	6	1/2	A-F	55-75	2-3 wk.	1 bu.
Lettuce	1/4 oz.	18	12	1/4	B	90-120	3-4 wk.	50 head
Muskmelons	1/2 oz.	60	48	3/4	D	90-120	3-4 wk.	50 fruit
Mustard	1/4 oz.	24	9	1/2	A-F	28	until fall	1 bu.
Okra	1 oz.	36	15	1	D	50	until fall	450 pods
Onions	1/4 oz.	18	4	3/4	A	110-140	4-8 wk.	1 bu.
Onion Sets	1 pt.	12	6	1/2	A	50-100	4-8 wk.	60 bun.
Parsley	1/4 oz.	12	6	1/2	E	90-120	until fall	45 bun.
Parsnips	1/2 oz.	18	4	1	A	100-150	until fall	1 bu.
Peas	3/4 lb.	24	2	1	A	50-70	1-2 wk.	1 bu.
Peppers	1/8 oz.	30	20	1/2	D	100-140	until fall	300 fruit
Pumpkin	2 oz.	96	60	3/4	D	90-120	until fall	25 fruit
Radish	1/2 oz.	12	2	1/2	A	25-30	1-2 wk.	50 bun.
Rhubarb	1/2 oz.	48	48					100 stem
Rutabaga	1/8 oz.	24	6	1/2				1 bu.
Salsify	1/2 oz.	18	2	1/2	A	130-150	fall	300 roots
Spinach	3/4 oz.	18	5	3/4	AIF	40-60	1-3 wk.	1 1/2 bu.
Spinach, N.Z.	1/2 oz.	36	18	1	E	70	until fall	50 lbs.
Squash, Bush	1/4 oz.	48	48	1	D	60-80	until fall	60 fruit
Squash, Winter	1/4 oz.	72	72	1	D	100-140	fall	35 fruit
Swiss Chard	1/2 oz.	18	15	1	A	50-60	until fall	25 lbs.
Tomatoes	1/16 oz.	40	36	1/2	D	100-150	6-12 wk.	2 bu.
Turnips, Roots	1/4 oz.	18	4	1/4	A-F	50-70	1-3 wk.	1 bu.
Turnips, Greens	1/2 oz.	12	4	1/4	A-F	50-60		1 1/2 bu.
Watermelons	1/2 oz.	12	4	1/4	D	90-130	3-4 wk.	20 fruit





HEAL ALL



DANDELION



COMMON  
CHICKWEED

LAWN  
PENNYWORT



YARROW



NARROW  
LEAVED  
PLANTAIN



QUACKGRASS

# Weeds

Weeds are the bane of a gardener's existence, but they need not be if you use precautions. The secret of killing weeds is to start as soon as they emerge. Either pull them up roots and all, spray with chemicals, or cut them off below ground level and mulch. But get them early!



YELLOW FOXTAIL



GROUND IVY



BROAD  
LEAVED  
PLANTAIN



CRABGRASS

## Get Rid of the Weeds!

Weeds are grass robbers since their root systems thrust laterally through the grass roots and steal moisture and valuable mineral salts needed by your lawn to insure hardy growth. Some weeds send out runners on the surface which take root, form new plants and proceed to take food from the grass, stunting it, shading newly germinated grass and ultimately discouraging growth. Tap roots, the central roots, are weed storage plants from which the lateral root system draws its reserve strength. Some weeds can be killed

by merely spraying weed killing chemicals on the leaves; others require chemical injection at the tap root. Modern chemical weed killers are selective and formulated to do a specific job.

Successful weed removal means getting them early—before the flowering stage, go after them in the spring or early summer. Weeds should be two or more inches high before spraying however, otherwise the leaf is not broad enough to fully

absorb the chemical and the tap root will revitalize them.

Dandelions can be easily controlled with our selected weed killers. Their root systems are comparatively simple and being a medium-broad leaved plant the chemical has freedom to work quickly and effectively.

It has been found that some regrowth of dandelions will occur if they are treated when the turf in general is suffering from drought.

Tell us the weed you are going after, and we'll prescribe the remedy!

# INSECTS IN THE GARDEN

It's not usually necessary to know the exact name of an insect to be able to fight him, but it is necessary to know **where** and **how** he works.

Here are the general groups and the general counter measures.

Insects in the soil are common and hard to combat. They include such types as wireworms, which attack the roots of plants and which can be killed by fumigating the soil before planting by drenching with special solutions which kill the worms without injuring the plants. Cutworms dig themselves into the soil while resting on it, but come to the surface to work. They can be killed with poison bait.

Insects that work on the part of the plant above ground fall into three groups. One is composed of the hopper, caterpillars and the like. Their damage is evident by the fact that they actually eat leaves, buds or flowers. They are called the chewing insects and are the easiest to control because they are killed by residual poisons. Spray or dust the plants with an insecticide of this nature and when the insect begins his next meal he poisons himself.

Of the sucking insects, aphids are the most common. They feed on the plant juices, and for that reason are immune to poisons sprayed on the surface of the leaves. They are readily killed though by contact sprays and you can purchase all-purpose sprays and dusts which are effective both as residual poisons and as contact sprays defending against both chewing and sucking insects in a single application.

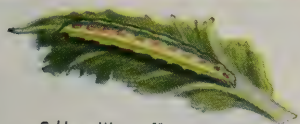
Borers are safe from you once they have entered the plants, but are defenseless in earlier stages before they have entered the stem. When spraying for sucking insects be sure to fog up the spray up under the leaves near the central stem and you will prevent infestation there.



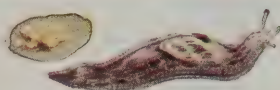
Cutworm—1-3/4"



Tomato Hornworm—3" to 4"



Cabbage Worm—1"



Giant Slug—4" or more



Japanese Beetle—1/2"



Mexican Bean Beetle—5/16"

## PORTRAIT GALLERY OF GARDEN INSECTS



Asparagus Beetle—7/32"



Potato Beetle—3/8"



Potato Flea Beetle—1/16"



Bean Weevil—1/8"



Chinch Bug—3/16"



Tarnished Plant Bug—1/4"



Red Spider Mite—1/60"



Rose Chafer—3/8"



Beet Leafhopper—1/8"



Melon Aphid—3/32"



Bean Aphid—3/32"



Squash Bug—5/8"



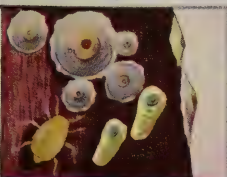
Sow Bug—1/2"



Mealy Bug—3/16"



Gladiolus Thrip—1/16"



San Jose Scale



Corn Earworm—2"



Oyster-shell Scale



# PLANT BY THE 1960



# MOON PLANTING GUIDE

● **1st QUARTER, MOON IN-CREASING**—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye.

● **2nd QUARTER, MOON IN-CREASING**—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes.

● **3rd QUARTER, MOON DECREASING**—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, etc.

● **4th QUARTER, MOON DECREASING**—In the 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths.

## Signs of the Zodiac

♈ **ARIES:** Tends to dryness, barrenness. Fairly good for cultivating.

♉ **TAURUS:** Fairly productive. A good sign for planting root crops particularly potatoes and bulbs.

♊ **GEMINI:** Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER:** Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO:** Most dry and barren sign. Use only to kill weeds, destroy roots.

♍ **VIRGO:** Moist but barren. Not recommended for planting or transplanting; good for cultivating.

♎ **LIBRA:** Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO:** Next to Cancer in productivity. Irrigate but do not dig potatoes.

♐ **SAGITTARIUS:** Generally con-

sidered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN:** Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS:** Somewhat barren.

Good only for cultivation and extermination of pests.

♓ **PISCES:** Similar to Cancer so use for same purposes. Very productive.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time).

## 1960 Moon Phases

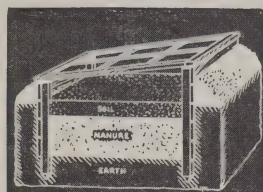
JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
2 ☾ .3:21a	3 ☽ .3:18a	1 ☽ .0:23p	2 ☽ .7:46p	2 ☽ .3:57p	1 ♀ .10:37a
4 ♀ .9:24a	5 ♀ .2:59a	3 ♀ .9:09p	5 ☽ .8:00a	5 ♀ .2:58a	3 ☽ .7:25p
6 ☽ .7:25p	8 ☽ .3:37a	6 ☽ .11:36a	7 ♀ .5:57p	7 ☽ .10:26a	6 ♀ .0:16a
9 ♀ .7:45a	10 ☽ .3:06p	8 ♀ .11:23a	10 ☽ .0:32a	9 ♀ .2:02p	8 ♀ .1:28a
11 ☽ .8:51p	13 ♀ .0:33a	11 ♀ .8:46a	12 ♀ .4:00a	11 ♀ .2:54p	10 ♀ .0:48a
14 ☽ .7:59a	15 ☽ .7:55a	13 ☽ .3:17p	14 ♀ .5:39a	13 ♀ .2:53p	12 ☽ .0:26a
16 ♀ .6:01p	17 ♀ .1:23p	15 ♀ .7:35p	16 ♀ .7:02a	15 ☽ .3:56p	14 ☽ .2:21a
19 ☽ .2:13a	19 ♀ .5:10p	17 ♀ .10:37p	18 ☽ .9:34a	17 ☽ .7:57a	16 ♀ .7:44a
21 ♀ .7:58a	22 ♀ .7:39a	20 ♀ .1:15a	20 ☽ .1:59p	20 ♀ .1:57a	18 ♀ .4:37p
23 ♀ .11:01a	23 ☽ .9:34p	22 ☽ .4:11a	22 ♀ .8:26p	22 ☽ .11:01a	21 ♀ .3:47a
25 ♀ .11:59a	26 ☽ .0:06a	24 ☽ .8:03a	25 ☽ .4:52a	24 ♀ .9:57p	23 ☽ .2:07p
27 ☽ .0:21p	28 ♀ .4:38a	26 ♀ .1:32p	27 ♀ .3:19p	27 ☽ .10:07a	26 ☽ .4:51a
29 ☽ .2:01p		28 ☽ .9:17p	30 ☽ .3:23a	29 ☽ .10:50p	28 ♀ .4:51p
31 ♀ .6:45p		31 ♀ .7:34a			

Changes	Changes	Changes	Changes	Changes	Changes
5 ☽ .1:57p	4 ☽ .8:24a	5 ☽ .5:07a	4 ☽ .1:03a	3 ☽ .6:57p	1 ☽ .9:57a
13 ☽ .5:51p	12 ☽ .11:24a	13 ☽ .2:26a	11 ☽ .2:28p	10 ☽ .11:43p	9 ☽ .7:02a
21 ☽ .2:56a	19 ☽ .5:46p	20 ☽ .0:40a	18 ☽ .0:58a	17 ☽ .1:59p	15 ☽ .10:41p
28 ☽ .0:16a	26 ☽ .0:24p	27 ☽ .1:38a	25 ☽ .3:45p	25 ☽ .6:27a	23 ☽ .9:27p
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 ☽ .2:45a	1 ♀ .8:00p	2 ☽ .6:36a	1 ☽ .4:15p	2 ☽ .9:29a	2 ♀ .1:02a
3 ☽ .9:06a	3 ♀ .9:23p	4 ☽ .7:52a	3 ♀ .7:50p	4 ♀ .5:48p	4 ☽ .10:15a
5 ♀ .11:40a	5 ☽ .9:22p	6 ♀ .10:30a	6 ☽ .1:12a	7 ☽ .4:27a	7 ☽ .0:23a
7 ♀ .11:34a	7 ☽ .9:46p	8 ☽ .3:50p	8 ♀ .9:19a	9 ☽ .5:00p	9 ♀ .1:11p
9 ☽ .10:45a	9 ☽ .0:26a	11 ☽ .0:34a	10 ☽ .8:21p	12 ♀ .5:24a	12 ☽ .0:08a
11 ☽ .11:23a	12 ☽ .6:36a	13 ☽ .0:12p	13 ☽ .8:55a	14 ☽ .3:02p	14 ♀ .7:18a
13 ♀ .3:14p	14 ♀ .4:32p	16 ☽ .0:46a	15 ♀ .8:37p	16 ♀ .8:48p	16 ♀ .9:05a
15 ☽ .10:53p	17 ☽ .4:42a	18 ☽ .0:05p	18 ☽ .5:32a	17 ♀ .11:15p	18 ♀ .10:16a
18 ♀ .9:42a	19 ☽ .5:16p	20 ☽ .8:55p	20 ♀ .11:04a	21 ☽ .0:02a	20 ☽ .9:50a
20 ☽ .10:10p	22 ♀ .4:27a	23 ♀ .3:17a	22 ♀ .2:15p	23 ☽ .3:51a	22 ♀ .10:51a
23 ☽ .10:45a	24 ☽ .2:02p	25 ♀ .7:41a	24 ♀ .4:29p	25 ☽ .8:53a	24 ☽ .2:40p
25 ♀ .10:30p	26 ♀ .9:21p	27 ♀ .10:54a	26 ☽ .6:59p	27 ♀ .8:53a	26 ☽ .9:34p
28 ☽ .8:32a	29 ♀ .2:17a	29 ☽ .1:33p	28 ☽ .10:28p	29 ☽ .4:03p	29 ♀ .7:03a
30 ♀ .3:50p	31 ♀ .5:08a		31 ♀ .3:13a		

Changes	Changes	Changes	Changes	Changes	Changes
1 ☽ .9:43p	6 ☽ .8:41p	5 ☽ .5:19a	4 ☽ .4:17p	3 ☽ .5:58a	2 ☽ .10:25p
8 ☽ .1:37p	13 ☽ .11:38p	12 ☽ .4:21p	12 ☽ .11:25a	11 ☽ .7:47a	11 ☽ .3:36a
15 ☽ .0:31p	22 ☽ .3:16a	20 ☽ .5:13p	20 ☽ .6:03a	18 ☽ .5:47p	18 ☽ .4:47a
31 ☽ .6:39a	29 ☽ .1:20p	27 ☽ .7:13p	27 ☽ .1:35a	25 ☽ .9:43a	24 ☽ .8:36p

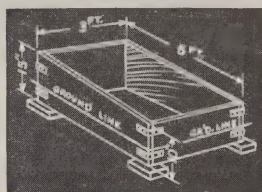


# Start Early Plant Enough



**HOT  
BEDS**

The hotbed should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day. Pit should be 24" deep. Fill to top with fresh strawy horse manure and press down six inches. Set frame over manure and all around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat. As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees.



**COLD  
FRAMES**

A cold frame is the same as a hot bed without manure or other source of artificial heat. It depends upon the sun for heat and must be covered with hot bed mats to conserve this heat at night and in coldest weather. Most important spring use for the frame is the hardening off of seedlings started indoors.

The bed in your cold frame should consist of a 2" layer of gravel for drainage, 1" sand, and 4"-5" of good garden loam. Sand under the soil makes transplanting easier. Always water in the early morning.

## Starting Seed Indoors

For starting seed indoors, use a shallow box. Place pieces of broken clay pots over drainage cracks to prevent clogging, then spread some soil lumps over the bottom before you fill the box with a mixture of equal parts of sand, soil and peat moss. Pile high in the box. Press down firmly on the sides with your hands. Scrape off surplus soil with a board or tamper. Firm loose soil until it is spread evenly about  $\frac{3}{4}$  inch below the top of the seed box. Then, mark off straight rows about 2 inches apart. **Sow seeds uniformly thick, just so they don't touch.** Use an old kitchen sieve to screen soil over the top after the seed are sown. Do not cover with more than  $\frac{1}{4}$  inch of soil. Use the tamper to firm the soil over the seeds. **Water soil after firming.** Place a strip of burlap over the box and pour water over it. Never pour water on the bare soil. Another effective way of watering is to place the box in a pan of water. **Cover the box with newspaper or a piece of glass to prevent fast drying. Keep moist.**

When seedlings appear, remove the newspaper. If you are using glass, leave it on a little longer, but slide it over a bit to give air. As soon as the seedling makes its second leaf, it must have attention or it will become weak and spindly. Use a pointed stick to transfer the young plants to flats. This is known as "pricking out."

Flats should be made about 3 in. deep, 14 in. wide and 24 in. long. This is a good size to handle and will accommodate 42 plants spaced 2 x 3 inches. The soil for flats should be reasonably fine and sifted only to remove stones and large lumps and be only a little lighter than the plants will ultimately need.

## A Seed Bed for Transplants

If you don't have a cold frame, you can prepare a special bed for starting seedlings and transplants. This bed will serve some of the important uses of the frame and can be quickly made, involving little or no expense.

The three essentials are **good drainage, soil rich in humus and protection from heavy rains.**

Select a site, preferably in the full sun, that is sheltered from the north and northwest winds by a building, a hedge or shrubbery.

Avoid a low spot, where water is likely to stand after heavy rains. However, if you don't have such a spot, drainage can be provided by raising the bed six inches, with sloping sides.

If the soil is naturally heavy and wet, dig it out to a depth of 8 inches and fill in about 3 inches of cinders or coarse gravel. Use the soil removed to fill the bed.

If your seed bed soil is not fine and full of humus, mix it with about one-third its bulk in peat moss and add enough sand to give it a granular texture. Mix these by shoveling them through a screen of one-half to one inch mesh. A convenient width is 4 feet, so that seeding, thinning and transplanting can be done from the sides. Narrow boards, held by stakes along the sides afford extra protection and can be used as supports for crosspieces over which burlap bags or similar shading material can be stretched while seeds are germinating or small transplanted seedlings get established. This seed bed is good also for starting biennials and perennials to be sown in the late summer. Properly shaded it is also a good place to root cuttings.



## Vegetable Gardens Are Fun!

**T**HE whole family shares in the profits from your own vegetable garden with better appetites and consequently improved health. Gardeners, young and old, enjoy all-season tan in the cultivation of a small garden, with all the benefits which come from an abundance of Vitamin D.

The work of caring for a vegetable garden is not difficult. After the ground has been spaded, no task involves more muscle than sweeping the floor. Modern methods of cultivating stir the soil not deeper than one inch. Adequate fertilization increases yield and quality, so that a small area gives a big harvest.

Experiments have demonstrated that all the vegetables needed by a family can be grown, in soil of average fertility, in less time than it takes to shop for them, and of higher quality than could be purchased.

Heaviest yield can be obtained from the vegetables of which we eat the leaves. These include the "greens" which are cooked, and the salad leaves, which are eaten raw. These are the "green, leafy foods" which are so rich in vitamins.

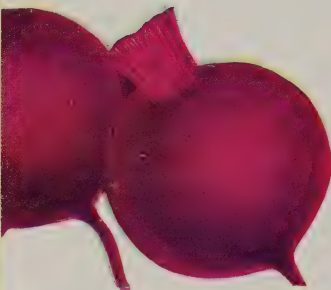
Next in food production are vegetables of which we eat the roots, stems, or seed pods. Beets, carrots, parsnips, broccoli, snap beans, turnips and onions all give hearty yields and are rich in calorie values, vitamins and minerals.

Tomatoes should be grown in every garden, pruned and staked preferably, so they take up no more space than carrots, yet yield abundantly over a long season. Cucumbers, melons and pole lima beans are all good crops for training on a garden fence, where they will yield well.

Whatever your garden plans, come and see us and we'll help you make the best selections from our supplies of fresh seed chosen for our own climate and soil.



TURNIP,  
Purple Top, White Globe



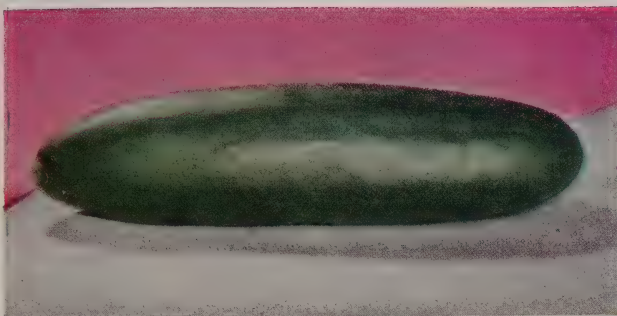
BEETS, Detroit Dark Red

PEA, Freezer 37



SQUASH, Early Prolific Straightneck





CUCUMBER, Smoothie



RADISH, Champion

SQUASH,

### Asparagus

A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of **ASPARAGUS ROOTS** rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to  $\frac{1}{2}$ " depth. Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. When a year old and in early spring transplant to well enriched beds in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year.

**MARY WASHINGTON (fr)**—Highly rust resistant. Heavy yielder, producing early large shoots of rich, dark green color with tightly closed tips. 20c.

### Beans

Sow in rows  $2\frac{1}{2}$ ' to  $3\frac{1}{2}$ ' apart. Plant seed  $1\frac{1}{2}$ " to 2" deep and 3" to 4" apart. Do not plant until weather is warm and settled. Press soil around seeds. Thin young plants to about 6" apart. Keep cultivated until plants blossom. **DO NOT CULTIVATE** when blossoms are at prime or when plants are wet with dew. Make plantings every two weeks for supplies throughout season.

#### Green Poddad, Dwarf or Bush

**COMMODORE (Kentucky Wonder Bean)**—A vigorous strain producing long, slightly curved, rounded and meaty pods with matchless flavor. 25c.

**CONTENDER**—Very early and abundant. Mosaic resistant. Meaty, brittle and entirely stringless. Pkt. 15c.

**TENDERGREEN**—Very meaty, smooth, dark green, round tender pods of delicious flavor, Mosaic-resistant. 25c.

**TOPCROP**—Medium green, round, meaty, entirely stringless. Mosaic resistant. 25c.

#### Wax Poddad, Dwarf or Bush

**CHOCOTAW**—High yielding, mosaic resistant, drought and heat tolerant and sets pods even under high temperatures. 25c.

**PENCIL POD WAX**—An old favorite round wax bean. Rich yellow color. 20c.

### Beans, Lima

**BURPEE'S IMPROVED BUSH**—Popular bush lima. Easy to shell. Good fresh as well as frozen. 20c.

**FORDHOOK 242**—Heavy yielder. Excellent fresh, canned or frozen. Delicious flavor. 20c.

**HENDERSON'S BUSH (fr)**—65 days. Most widely used of the baby lima beans for home and market gardens. Productive, high quality, disease resistant. 15c.

### Beans (Pole)

In warm ground, set poles 4' to 8' long slanting a bit to the north in rows 4' apart. (Extending north and south the poles will be 3' apart in the row.) Plant 5 to 8 beans about 1" deep around each pole. When growth is sufficient thin to four plants.

**KENTUCKY WONDER (fr)**—65 days. The leading pole bean, the best known and most widely used. Prized for its flavor, both in snap and green shelled stage. Kept picked, they will bear all season. 20c.

### Lima (Pole)

**KING OF THE GARDEN (fr)**—88 days. Outstanding pole lima for heavy production and climbing ability. Numerous large pods filled with 5 to 6 large beans of excellent quality. 20c.

### Beets

Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Make three sowings, one early, one three weeks later and one 60 days before fall. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart.

**DETROIT PERFECTED (fr)**—60 days. Standard of excellence in table beets. Smooth, globular roots of deep oxblood red. Sweet and tender.

**RUBY QUEEN**—A home garden beet with very short tops. Of uniform growth with luxurious red interior.



## To Save Space Let Them Climb

All cucumbers will climb if they are permitted to do so. In a small vegetable plot, cucumbers, tomatoes, peas and beans can be grown on the fence.

When garden space is limited, wise home gardeners will exploit the air rights of their holding, and grow these vegetable crops which like to climb.

Cucumbers are among these, and any cucumber will be happy climbing on a fence, whether it is called a climber or not. Even those with the largest fruits, so heavy you might think they would need support, seldom do. So, save space . . . let 'em climb!

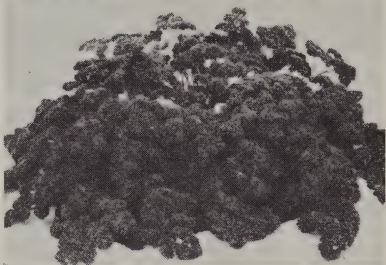
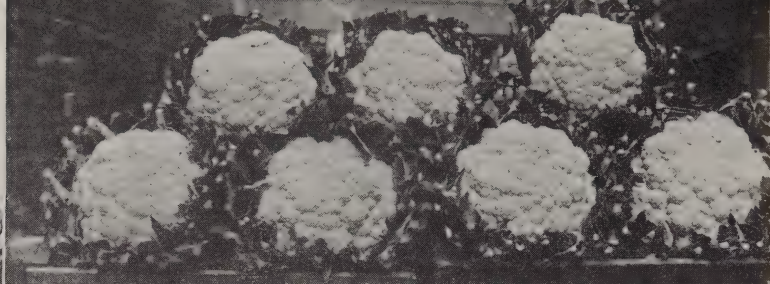




Cauliflower, Early Snowball

Ornamental Gourds

Parsley, Curled→



## Broccoli

Plant and cultivate like cabbage and cauliflower.

**DE CICCIO (fr)**—70 days. An early market and freezing variety of recent introduction. The plant is tall, erect, with a fairly loose central head of yellowish green, followed by side sprouts. 20c.

## Brussels Sprouts

Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishment sent to lower stem will be forced into the sprouts. Do not use until after heads have matured.

**JADE CROSS**—All America Silver Medal for 1960. Earliest, most uniform and prolific. Delicious flavor. 50c.

## Cabbage

Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Space 12" x 24". Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large.

### Standard Early Varieties

**COPENHAGEN MARKET**—68 days. Excellent, early short season type. Short stems, 6½ in., 3½ to 4-lb. heads.

**GOLDEN ACRE**—65 days. Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. 20c.

**JERSEY QUEEN**—Sweet, tender early cabbage. Plants are small and the heads of conical shape. Highly recommended. 15c.

### Late or Winter Varieties

**CHIEFTAN SAVOX**—88 days. Flattened globe-shaped. Crumpled leaves. 20c.

## Carrots

Use sandy loam enriched by manure the previous year, if possible; but any good land if deeply and well worked will produce a good crop. Sow seed as early as ground can be worked. Sow seed ½" to 1" deep in drills 16" to 18" apart. Press soil firmly above seed. When plants appear use cultivator or wheel hoe and thin from 2" to 6" apart, according to type. Keep cultivated.

**CHANTENAY, RED CORED (fr)**—70 days. Root has thick shoulder and tapers to slight stump root. 5-in. long.

**DANVERS HALF LONG**—75 days. Sweet, tender roots. 6 to 7-in. long tapering to a blunt point. Fine for storing.

**GOLD PAK**—Short, erect. Roots long, slender smooth, slightly tapered and pointed. Small indistinct cores and deep orange skin with rich orange colored flesh. Roots range from 8½ to 9½ inches in length. Matures about two weeks earlier than Imperator Long Type.

**IMPROVED IMPERATOR (fr)**—77 days. Fine-grained, tender. Rich orange, indistinct core. Roots taper to semi-blunt. 20c.

## Cauliflower

Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying well at top.

**EARLY SNOWBALL (fr)**—55 days. Best and most widely used early variety. Medium, firm compact heads of fine flavor. 6-7 inches in diameter. 30c.

## Celeriac

**LARGE SMOOTH PRAGUE**—120 days. (Turnip rooted celery). Smooth spherical roots. 2 to 3-in. thick. 20c.

## Sweet Corn

Rows should be 3' to 4' apart. Seed 12" to 18" apart in rows or hills, covering

with fine soil 1" to 2" deep firmly pressed down. In hills, plant 4 to 6 grains per hill. Later thin to 2 to 3 stalks to a hill. Make several plantings at intervals of 14 days for continuous crop.

### Hybrids

**GOLDEN CROSS BANTAM**—The most widely used of all the hybrids for canning, freezing and the home garden. 10-14 rows of sweet light golden yellow kernels. 25c.

**GOLD RUSH**—Two weeks earlier than Golden Cross Bantam. Ears equally as large and delicious. 25c.

**IOCHIEF**—83 days. A yellow hybrid sweet corn with sensational qualities. Sugar sweet and tender. 20c.

**STOWELL'S EVERGREEN HYBRID**—Deep kernels, white, tender and sweet. Recommended for eating fresh, freezing and canning. 25c.

## Cucumber

Select soil fully exposed to sun and enrich thoroughly with fertilizer. Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." Plant each hill about 36" apart. Cucumber vines like to stretch out, so plant rows about 4 feet apart. The old tale that melons or squash will cross pollinize with cucumbers and affect their taste if planted nearby is untrue. When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. Use plenty of moisture; cucumbers are 90% water.

**MARKETER**—68 days. Fine new variety, very prolific. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy white flesh 7¾-in. long.

**NATIONAL PICKLING**—55 days. Rich dark green. Straight and rather blunt at ends but not chunky. Best pickler. 20c.

**STRAIGHT EIGHT**—68 days. Unsurpassed as slicing cucumber. 2½-lb. fruits, rounded at ends, medium green. 20c.

## Eggplant

Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

**BLACK BEAUTY**—Tender and tasty at all stages. The large, rich, deep purplish fruit retain their color for a long time. 25c.

## Kale or Borecole

Early fall or spring sowing. Either in rows or broadcast. To produce large plants have rows 2' apart and thin to 2' in rows. Leaves are best after coming of cool weather in fall.

**DWARF BLUE CURLED SCOTCH**—55 days. Wide spreading, fine curled blue-green plant plume-like leaves. Used as a vegetable and for ornament.

## Lettuce

Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked, transplant. For later use, sow seed in open ground as soon as weather is favorable. Thin plants in rows 4" to 8" depending on variety.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rooted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

**GREAT LAKES**—83 days. An outstanding Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads solid. 25c.

**WHITE PARIS COS** or **TRIANON**—66 days. Medium large self-folding dark green loaf shaped heads. Greenish-white, well blanched interior.

### Loose Leaf Varieties

**BLACK SEEDED SIMPSON**—46 days. Light green, frilled and crumpled.

Broccoli, De Cicco



**OAK LEAF**—43 days. A popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Fine resistance to hot weather. 20c.

**RUBY**—A beautiful salad lettuce, non-heading, very fancy, frilled and crisp loose leaf. White seeded, best red lettuce.

**SALAD BOWL**—44 days. Delicious bowlful of rich green leaf lettuce. 20c.

**BIBB**—A distinctive variety, very early and of highest quality. Tender, crisp and free of bitterness. Grow in early spring or fall. 20c.

**BURPEANA**—The gourmet's delight. Heads are small, ideal for serving as individual salads. Always crisp and without bitterness. The outer leaves, as well as inside retain their crispness and delicate flavor for a long time. 35c.

Eggplant, Black Beauty



## Melons

### Muskmelon and Cantaloupe

Easily injured by cool weather. Before planting, spade liberal forkful of well rotted manure into each hill. Plant 8 to 10 seeds to a hill. Thin plants to four per hill after third leaf develops, and train vines in different directions. On moist ground, use shingles to hold melons off ground to prevent rotting. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor.

**DELICIOUS 51**—Sweet, bright orange flesh of a good rich flavor. Fruits weigh about 5 pounds. 25c.

**GOLDEN DELIGHT**—For the home garden or market. Has thick orange flesh, extra good quality with spicy flavor. 20c.

**HARVEST QUEEN**—Fruits oval with shallow ribbing, heavily netted and the tough rind stands handling and shipping well. A delicious sweet musky flavor. 25c.

## Watermelon

Requires about same culture as muskmelons, except the vines need more room. Fertilize each hill liberally and cultivate thoroughly.

**DIXIE QUEEN**—Flesh is delicious deep red when ripe. Very sweet and free from fiber. Weight 30 to 35 lbs., highly wilt resistant. 20c.

**KIECKLEY'S SWEET** or **WONDER-MELON**—85 days. Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 20c.

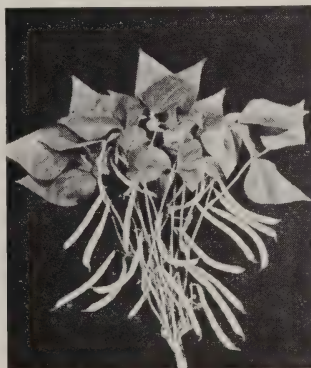
**NEW HAMPSHIRE MIDGET**—78 days. Icebox size, very good flavored strawberry red flesh. The best midget so far produced and recommended for short season areas. 25c.

**SUGAR BABY**—Early, productive and deliciously sweet. "Ice-box" size. Relatively few, small seeds. Good flavor. 25c.



BEET, RUBY QUEEN

A home garden beet with very short tops. Of uniform growth and luxurious red interior of outstanding quality and good flavor. Tops are uniform, dark green.

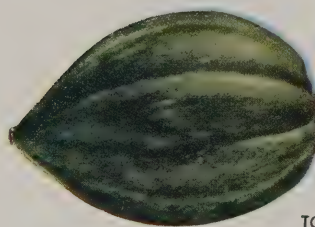


SNAPBEAN, PEARL GREEN

A distinct white seeded Tendergreen type bush bean with round pods, straight, green and firm. Resistant to common bean Mosaic. Plants bushy and vigorous.



SQUASH, Table Queen



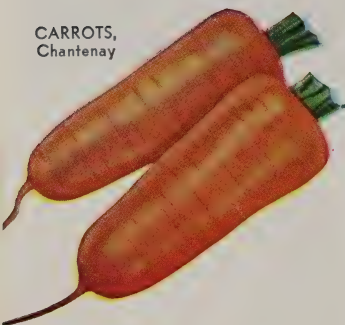
BEANS, Topcrop



TOMATOES, Rutgers



CARROTS,  
Chantenay



PEPPER  
California Wonder



### Mustard

Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil  $\frac{1}{2}$ " deep. You may also sow seed in autumn to raise greens.

**FLORIDA BROAD LEAF**—Especially desirable for greens because of the smooth leaves of medium green. 20c.

**SOUTHERN GIANT CURLED**—Popular curled mustard for spring or fall planting. Pleasing, mild flavor. 15c.

**TENDERGREEN** — Rapid growing with large, broad, dark green leaves. When cooked, tastes like spinach. 20c.

### Okra or Gumbo

Sow in rows about 3" apart. Cover seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a tender, hot weather plant. Pick before woody fibres develop.

**DWARF GREEN LONG POD**—Pods are ribbed, pointed, fleshy, dark green. 20c.

**EMERALD**—Highly productive. The good sized pods are very dark green, spineless and smoothly rounded. 15c

### Onions

Plant as soon as soil can be prepared. For best yield, plant on very fertile land —fall plowed, and thoroughly fertilized.

When the plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for larger bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every two weeks in summer.

**BERMUDA**—Extremely mild, juicy white flesh. Especially desirable for early home use. 20c.

**EVERGREEN BUNCHING**—Seed sown in spring will provide mild, green scallions in the fall. Does not form bulbs. 25c.

**SOUTHPORT YELLOW GLOBE** — Flesh fine grained, creamy white, fairly strong flavor, solid and juicy. Good keeper. 20c.

**SWEET SPANISH**—Sweet, round, glistening white onion. Mild flavor, solid and crisp. 20c.

**WHITE PORTUGAL** or **SILVERSKIN**—100 days. Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler.

### Onion Sets

Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant set right side up and cover with garden rake; then firm the soil well over the sets.

ALL VEGETABLE SEEDS

**15c**

Per Packet

Unless Otherwise Noted

## How To Grow Cabbage

For early cabbage, sow the seed in fine soil in flats in the hot bed 4 to 6 weeks before plants are to be set out. Plant the seed  $\frac{1}{2}$  inch deep in drills two to three inches apart. Don't make the soil too rich, since it is likely to make the seedlings grow too fast and become leggy. Water and keep in temperature 50 to 60 degree.

When seedlings are 3 to 4 inches high, prick out and replant in flats or boxes. This will insure stocky, healthy plants.

Set the seedlings out on a warm cloudy day and put out a sowing of the midseason varieties for kraut at the same time right in the open ground. When raising seedlings of the late, or winter varieties, follow the same method, but the flats or boxes are kept outdoors, rather than under glass. Frequent cultivation is needed to keep down weeds and conserve soil moisture. About three weeks after the plants are set out, topdress with nitrate of soda,  $\frac{1}{4}$  lb. per 100 feet. This is necessary only for early season varieties.



PEAS, Little Marvel, Thos. Laxton

From among all the thousand of available varieties, we have selected those which will produce the best quality and the greatest yields in the gardens of our territory. We offer you this compact selection as a safe, sound base for your plans.



CORN, Earliest Market King



TOMATO, Homestead 24

A standard red, uniform Asgrow selection from the original Homestead. The plants are large with a heavy foliage cover, setting fruits well at high temperatures. Fruits are medium large, slightly flattened globe, relatively free from cracking and meaty and firm.

MUSKMELON  
Golden Delight



WATERMELON,  
Dixie Queen



## Parsley

Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water overnight before planting. Sow early and not too deeply. Space plants 6" apart. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter.

**PARAMOUNT**—70 days. The best looking, finest and most uniformly curled. Dark green leaves, tall strong stems. 20c.

## Peas

Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, peacky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for the taller types. Gather crop as fast as it is fit to use or new pods will cease to form and those partly advanced will cease growth.



Squash, Butternut

## Early and Second Variety

**FREEZONIAN** (fr)—60 days. Luscious, melting peas that retain their garden fresh sweet flavor after freezing. 3½ inch pods with 8 or 9 medium sized peas. Pkt. 20c.

**THOMAS LAXTON** (fr)—62 days. Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4½ to 5-in. long with 7 to 9 large peas. 20c.

**LITTLE MARVEL** (fr)—62 days. Outstanding, dwarf. Fine quality, large yield. Single and double, dark green. 3-in. pods—blunt, plump, well filled with 7 to 8 medium, light green tender peas. 25c.

## Edible Podded or Sugar

**TALL MELTING SUGAR**—72 days. Wilt resistant. Coarse light-green vine, 54-in. Single 4½-in. pods, broad, indented light, blunt, stringless, without fiber, fleshy. Contains 7 peas. Pkt. 20c.

## Peppers

Need long growing season; start indoors 8 weeks before plants are wanted. Set plants 15" x 24" and feed liberally for bigger fruits.

Warm, mellow soil in sheltered location is best. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.

**CALIFORNIA WONDER**—74 days. Number one quality peppers, about 4-in. long and 3½-in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkable thick walls, tender, sweet. 20c.

**HUNGARIAN YELLOW WAX**—Waxy, canary yellow changing to bright red when ripe. Quite hot. 20c.

**LONG SLIM CAYENNE**—70 days. The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering. 20c.

**SUNNYBROOK PIMENTO**—79 days. Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long. 25c.

**YOLO WONDER**—Of the California Wonder type, but resistant to tobacco mosaic. Flesh is thick, firm and sweet. 25c.



Radish, Early Scarlet Globe

## Pumpkin

Plant in middle of spring among corn; or in hills 8' apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) store in warm, dry place.

**LARGE FIELD**—120 days. Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet.

**SMALL SUGAR or NEW ENGLAND PIE**—115 days. Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh.

## Radish

Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked. Make successive sowings up to hot weather.

**CHAMPION**—King sized edition of the popular and useful Cherry Belle. May be started early and its longstanding advantage makes it an all-purpose, beautiful crisp radish. 25c.

**CHERRY BELLE**—Round, smooth red with white, crisp and firm flesh. 25c.

**FRENCH BREAKFAST**—25 days. Roots thicker toward bottom. 1½-in. long by ½ to ¾-in. Dull scarlet, white-tipped.

**ICICLE**—27 days. Tapering roots 5 to 5½-in. White, mild flesh.

**SCARLET GLOBE**—Crisp and tasty white flesh with bright scarlet skin. 15c.

**SPARKLER**—The crisp, juicy flesh is pure white and of a good snappy flavor. 15c.

## Spinach

Plant seed in very rich soil in rows spaced 14" to 18" apart. Keep plants thinned out from 3" to 6" apart in the row. (Seed may also be sown broadcast.) Sown in fall for winter use and spring for early use.

**GIANT NOBEL**—43 days, large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick smooth, deep green leaves. 20c.



Tomato, Rutgers

**NEW ZEALAND**—65 days. Thrives in dry hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked.

**VIRGINIA SAVOY**—A greatly improved selection, the leaves of which are large, dark green, extremely crisp and tender. Blight resistant. 20c.

## Squash

Follow same planting and culture as for melons and cucumbers. Plant summer varieties 6 or 8 seeds in hill 3" to 4" apart each way and winter squash 8" apart. Plants bear longer if squash is picked off as soon as it is ready for use.

## Summer Varieties

**BLACK BEAUTY**—Earliest, most prolific bush Zucchini. Grows 2 to 3 feet high in open bush form with a single semierect stem.

**EARLY PROLIFIC STRAIGHTNECK** (fr)—50 days. Earlier, smaller, and more productive than Giant Summer Straightneck, and more uniform. Brilliant yellow. Fine for home or market. 20c.

**EARLY WHITE BUSH SCALLOP**—52 days. Pale green fruits changing to creamy white. Milk-white delicious flesh.

**SUMMER CROCKNECK**—The most popular summer curved neck squash. Fruits are meaty, bright yellow skin and salmon-orange flesh of delicious flavor. 20c.

**ZUCCHINI**—Cylindrical smooth, deep blackish green with creamy white flesh. Extremely tender. 25c.

#### Fall and Winter Varieties

**BUTTERCUP**—Turban shaped fruits weigh 4 to 5 pounds. Thick orange flesh, cooks dry and sweet with a pleasing, rich flavor. Good keeper. 20c.

**BUTTERNUT**—80 days. Dry sweet yellow flesh of superb texture and excellent flavor. Has only a small seed cavity. Is tasty baked or boiled. Easy grown. 20c.

**HUBBARD**—The popular winter squash for all purposes. Fairly large fruits with dark green warty skin and attractive deep orange-yellow flesh which is fine grained, sweet and dry. 20c.

**TABLE QUEEN (fr)**—Acorn-shaped, green, deeply furrowed flesh rich yellow, dry, mealy, delicious. Convenient size for baking. 25c.

#### Turnip

For summer greens or roots, sow as early as radishes and lettuce. Then cut when plants are 6" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and texture.

**JUST RIGHT**—All America Silver Medal 1960—Heavy cut-leaf foliage and well developed white smooth roots of flattened globe shape. Uniform growth and delicious flavor. 20c.

## Onions From Your Garden From Spring To Christmas

Home gardeners can harvest onions from early spring until Christmas if they avail themselves of the perennial and annual types. Egyptian onions are planted with top sets in the fall and are ready for harvest as soon as the ground thaws out the next spring.

Bottom sets, which are dwarfed onion bulbs stored over winter, will produce a harvest of green onions in three weeks after they are planted and since they ignore frosts, can be planted as soon as the soil is prepared.

Onion seed can be sown at the same time, and between sets and seeds, a continuous harvest may be reaped, concluding with the big Spanish type sweet onions in the late summer, and winter onions in the fall.

From 15 to 30 pounds of large onions can be grown from a pound of onion sets which do not average over three-quarters of an inch in diameter. To grow large onions, use the smallest sets, planted an inch deep. To grow spring onions select the larger sets and place them two or three inches deep. The smaller sets do not make seed stalks, but devote their energy to maturing a bulb, which will keep well in storage, even in a warm basement.



PEPPER, Banana

**PURPLE TOP WHITE GLOBE**—55 days. Large, sweet tops. Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh.

**FOLIAGE TURNIP**—Seven top. Winter greens of excellent quality.

#### Tomato

Do best in sandy, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out 3 apart, in boxes or pots—later transplant into the garden. Or keep in flats until weather is

warm and settled, and then set plants out directly into the garden. Water around the roots of the plants when setting them out if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.

**BEEFSTEAK**—96 days. Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich subacid flavor. One of the best for home use. 25c.

**CAMPBELL'S 378-A**—A fine large tomato, heavy yielding and resistant to both cracking and fusarium wilt. Delicious flavor. 20c.

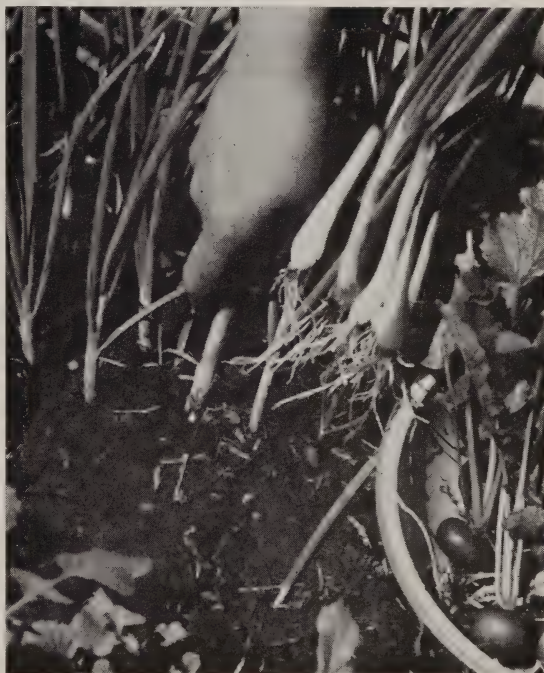
**FIREBALL**—Early. Good size, smooth, globe shaped and unusually firm. Mild flavor. 25c.

**GLAMOUR**—Fine large, crack resistant fruit. Heavy yielder with solid, mild flesh. 25c.

**OXHEART**—90 days. One of the largest pink tomatoes, often weigh 1 lb. Interior is solid with thick, firm walls and small cavities with few seeds. 25c.

**RUTGERS**—80 days. Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, white thick walls. Red, firm flesh, low acidity. 20c.

**STOKESDALE**—70 days. An extremely important development. Smooth 7-oz. fruit, brilliant color, exceedingly solid flesh and small seed cavities. Matures in the second-early group, a full week earlier than Marglobe.







OKRA  
Perkins Mammoth



SQUASH  
White Bush Scallop



RADISH  
Early Scarlet Globe

## A Program for Garden Sanitation

About 75% of the work and much of the damage caused by insects can be eliminated by a simple, regular program of sanitation. Preventive dusting or spraying is much easier than waging a losing battle against bugs when they appear. Usually, less than 30 minutes a week should be needed for a regular sanitation program for both flowers and vegetables. Along with a regular program of insect control, plan on destroying weeds along the edges of your garden, the places where insects hide during the winter. If possible, control the weeds for a distance of at least 25 feet on all sides of the garden. Not only will this eliminate insect hiding places, but it will reduce the number of weed seeds that might otherwise blow into your garden.

Apply insecticides to the grass and weeds about every three weeks, so that most insects that might otherwise move into the garden will be killed. So will mosquitoes, chiggers and harvest mites that can make gardening unpleasant.

The regular use of weed killers will keep down all of the weeds without danger of poisoning animals or children. When using your weed killer around flowers and vegetables, however, be extremely careful not to allow the spray to drift onto these, as most garden plants are as easy to kill as the weeds.

D.D.T. for pest control has changed the whole scheme of garden layout. We can now divide vegetables into two groups—one to be dusted with D.D.T. and the other to be left undusted. The D.D.T. plot should be on the lee side so that wind will not drift to those not to be dusted.

Any spray that will kill grasses will also hurt the soil so that it can't be used for growing plants for several years. If this is not objectionable, use one of the non-selective weed killers and clear the ground of all vegetation (as on driveways, tennis courts, etc.) Ask us for details.



PEPPER  
Pimento

BEANS  
Ford Hook Bush Lima



## Quick-Figuring Chart for Dilutions

### • With Liquid Materials •

For Strength	Use to make 1 qt.	Use to make 1 gal.	Use to make 5 gals.	Use to make 25 gals.
1-100	2½ tspns.	10 tspns.	12 tbspsns.	1 qt.
1-200	1 tspn.	5 tspns.	6¼ tbspsns.	1 pt.
1-400	½ tspn.	2½ tspns.	3 tbspsns.	8 oz.
1-500	⅓ tspn.	2 tspns.	2½ tbspsns.	6 oz.
1-600	⅓ tspn.	1¾ tspns.	2 tbspsns.	5 oz.
1-800	¼ tspn.	1¼ tspns.	6 tspns.	4 oz.
1-1000	¼ tspn.	1 tspn.	5 tspns.	3 oz.

4 tspns. equal 1 tbspn.; 2 tbspsns. equal 1 oz.; 16 ozs. equal 1 pt.

### • With Powdered Materials •

Rate per 100 gals.	Use to make 1 qt.	Use to make 1 gal.	Use to make 5 gals.	Use to make 25 gals.
1 lb.	1 tspn.	1 tbspn.	4 tbspsns.	4 oz.
2 lb.	1¾ tspns.	1¾ tspns.	8 tbspsns.	12 oz.
3 lb.	2½ tspns.	2½ tspns.	2½ oz.	1¼ lb.
5 lb.	4½ tspns.	4½ tbspsns.	4 oz.	1½ lb.
6 lb.	5½ tspns.	5½ tbspsns.	4¾ oz.	8 oz.

Measures are for material weighing the same as flour. For heavier materials use less. Weigh if possible. Strain before using.

Ask for any vegetable varieties not listed limited space does not allow us to list all varieties

## Steps In Thinning Plants

For best results, thinning should be done gradually. In case of a crop which grows best when the plants stand four inches apart, do not thin at first to one plant for each four inches.

It is foolish to discard all excess plants prematurely when accidents, insects or disease may destroy many which are left. If

thinning is done by stages as the plants grow, they will finally stand at the optimum distance from each other and there will be small chance of vacant space in the row.

Lettuce plants, thinned to stand an inch apart; will soon reach a size when alternate plants can be removed to make salad; and this

process can be continued until the spacing is right for the remaining plants to mature. Carrots may be thinned the first time when they are thick as a pencil; and a dish of these thinnings will give those who have never eaten such tiny carrots before, a new idea of this vegetable.



SQUASH, Early Prolific Straightneck



CABBAGE  
Danish Ballhead  
and Golden Acre

BUSH SNAPBEANS, Greencrop



### Tender Bean Magic

For beans that are really tender, try some of the new varieties of high merit which are now available. They bear round pods, exceptionally long, and are filled with nutritious meaty tissue if they are picked before the seeds are formed. They give a large yield because they live longer, being resistant to the plant diseases which shorten the lives of the older varieties.

Just keep them picked off so seeds can form and you will enjoy beans of such flavor and tenderness as none except the home gardeners can experience.

Never sow beans until all danger of frost is over. They are sensitive to cold air and soil.



# HUDSON

SPRAYERS and DUSTERS



# GARDEN INVESTMENTS

Belgian Grown

## Camellia Flowered Begonias

Large bulbs planted in semi-shade or in a northern exposure will flower freely from early summer until late September or frost. Good rich soil with a generous amount of peat moss will produce saucer-sized double camellia-like blooms. Bulbs available in pink, white, red, yellow, orange and salmon.

## Hardy Garden Lilies

Hardy Lilies in your garden are a source of beauty and pleasure. The flowers are unusually long lasting and bulbs will usually produce for several years. For the best effect, lilies should be planted in groups of 3 or 6 of a single variety. Good drainage is essential and they prefer sun although they will stand slight shade. Although hundreds of lily varieties exist, the most popular and satisfactory varieties are these three:

*Rubrum Lily.* One of the most beautiful and satisfactory of all lilies producing many flowers for weeks. Petals are pure white shading to a bright red with red dots. Petals are turned back.

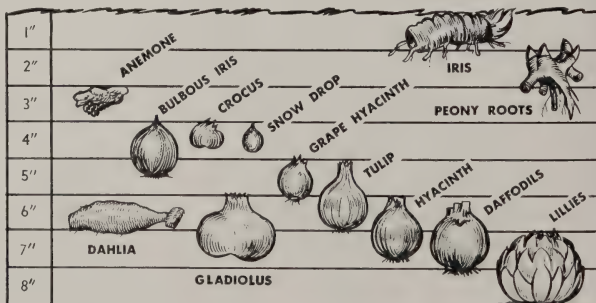
*Regale Lily.* A native of China producing huge white trumpet shaped flowers with yellow throats and brownish outer ribs.

*Auratum Lily.* Known as the "Golden Banded Lily of Japan," this variety produces huge scented flowers with a golden band through the center of each large flat white petal. Brown spots near the center of the flowers provide an interesting and beautiful combination.

## Stakes and Supports

Few gardens accessories are better value than bamboo plant stakes. For pennies, they protect flowers and plants from wind damage and mud spattering. Many plants need support and grow better with it. Buy plant ties too for fast and easy plant tying.

### Proper Planting Depth



## WHEN IS A "BULB" NOT A "BULB"?

Do you know the difference between true bulbs, corms and tubers? A true bulb is a bud, wrapped with fleshy scales which are the bases of leaves. Each bulb must have a period of dormancy, during which time the new plant—in all its details of leaves, petals, stamens, and pistils is formed.

**CORMS** resemble true bulbs in appearance, but the embryo flowers are not formed within the heart of the corm itself. They are developed rather by the corm's hoarded supply of nourishment. The corm differs also from the true bulb, in that its life is for one season.

**TUBERS** differ from true bulbs in that they are underground stems with eyes or buds on the surface. While some tuberous roots exhaust their energy in one season, and leave the newly developed roots to carry on, others rebuild their energy, increase in size, and give bloom the next season.

## Gladiolus

Gladiolus are among the easiest of all flowers to grow. But while they stand neglect better than most plants, they also respond beautifully to proper treatment. So it is well to note these brief points:

Soil should be well drained, sandy loam, preferably where no glads have been grown for the past 3 years. Cultivation to a depth of about 18 inches is highly desirable.

Full sun is best, although they do fairly well in partial shade. Glads may be set out as soon as frost is out of the ground, but extra-early planting gains little. A succession of plantings about ten days apart gives a long blooming season.

Depth of planting should be no more than 4" in heavy soil and 5 to 6" in light, sandy soil. Planting Glad bulbs too shallow in light soil will cause them to topple over or grow at bad angles. Space bulbs 3" apart in rows 18 to 30" apart. Be sure to eliminate air pockets under the bulbs.

Place bulbs in a well worked trench in staggered or zig-zag row—and cover at first with about two inches of loam. When shoots begin to appear, work balance of loam into the trench.

**Watering** is important. Glads need an abundance of moisture, especially after the plant is well developed. Cut the spike when first bud fully opens. The other buds will open nicely and give you a longer period of bloom. When cutting gladioli, it is very important to leave two or three of the broadest leaves at the base of the stalk.

**Insect Control**—It is wise not to delay your weekly dusting or spraying program after the sixth leaf has appeared. D.D.T. dust or spray is almost universally used today. A 5% dust is quite effective. Spray should be applied in a fine mist under heavy pressure. Ask us about our new insecticides.

Gladiolus thrips, mice, moles and rabbits are all enemies of your bulbs.

Leafhoppers carry disease and injure the plant by sucking the juice from leaves and stems.

Thrips can destroy your bulbs, even when stored. Ask us about our many good preparations to control these pests.

## Cannas

While cannas will tolerate cold soil, they usually do not start growing until hot weather comes. If planted in round beds, (18 plants on the outside, 12 in the second row, six for the third row and one in the center). A 7 foot bed will use 119 plants, with 12 plants on the outside row, six for the middle row and one to be planted in the center.

# HYPONEX®

Soluble **PLANT FOOD** Complete

**GROWS BETTER PLANTS IN SOIL, SAND OR WATER**

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs, or lawn. Produces stronger plants, more and larger flowers and fruit. Excellent for starting seedlings, cuttings, transplants. Clean, odorless. Won't burn if used as directed. Complete and balanced. Results sure.

2 1/2 oz. pkt. .... \$ .15	5 oz. .... \$ .59
2 oz. .... \$ .29	10 oz. .... \$1.00

2 lb. can. .... \$2.45
5 lb. can. .... \$4.95




# KILONEX®

**CRAB GRASS KILLER**

A new and approved mixture for destroying hairy and smooth types of crab grass without killing desired lawn grasses. Tested and recommended by lawn experts. Applied with sprinkling can or pressure sprayer. Mixes with water, 1 oz. KILONEX to 5 qts. water for application. 2 oz. KILONEX treats 500 sq. ft.

2 oz. .... \$ .50
5 oz. .... \$1.00
12 oz. .... \$2.25



# NIBONEX

## No-Nib'l

### RABBIT REPELLENT

Protects vegetables, flowers, shrubs against rabbit damage. Can be applied as dust from its sifter-top can, or mixed with water and sprayed on vegetables and ornamental plants to repel rabbits. Effective by taste and not by odor.



**6 oz. can \$1.29. Treats 300 ft. of row crop.**

# SYFONEX®

## BRASS SIPHON MIXER

Applies soluble fertilizers, weed and pest control chemicals accurately mixed and automatically as you sprinkle. Attaches to faucet, between hose lengths or behind nozzle, draws chemical concentrate from container in proportion of about 1 part concentrate to 16 parts water.

**Gives Quick, Easy Care of Lawns, Gardens . . .**

SYFONEX assures safe, easy feeding and care of lawns, gardens, shrubbery without danger.



**Retails \$2.25 each.**


# HYPONEX®

## AFRICAN VIOLET FOOD

**BRINGS MORE BEAUTY & BLOOMS TO ALL AFRICAN VIOLETS . . .**

Grows better plants, more and larger blooms. Instantly soluble, balanced and complete for developing healthier plants without over-stimulating or burning. Used in propagating as well as general culture. Excellent for all house plants. 1 oz. makes 6 gallons liquid plant food.

2 1/2 oz. pkt. .... \$ .15	5 oz. .... \$ .59
2 oz. .... \$ .29	10 oz. .... \$1.00



## AN INVESTMENT THAT PAYS GOOD DIVIDENDS

Few garden flowers pay such high dividends as bulbs and tubers! Lasting for years . . . they return your investment over and over . . . by giving so much beauty for such little care, or cost, or effort.





STARFIRE, AARS

IVORY  
FASHION  
AARS



# Beauty for Your

## Hybrid Teas

**AMI QUINARD** — Velvety crimson maroon.

**\*CHARLOTTE ARMSTRONG** — Lovely pointed buds of spectrum red open to beautiful rose red blooms. Each petal is edged with a silver line. AARS 1941.

**\*CHRYSLER IMPERIAL** — Unmatched by any other red rose. Rich, vivid tones of crimson enhanced by darker overtones of glowing ox-blood red. AARS 1953.

**CONDESA de SASTAGO** — Two-toned coppery pink inside, golden tint outside.

**COUNTLESS VANDAL**—Bronze copper and pink flooded with gold and reflexed with silver.

**CRIMSON GLORY** — Beautifully formed blooms of deep vivid crimson. Fascinating fragrance.

**ECLIPSE**—Streamlined and modern with slim, tapering buds. The best all purpose brilliant golden yellow.

**ETOILE de HOLLANDE** — Bright red, large, semi-double. Fragrant and vigorous.

**\*FORTY-NINER**—The most brilliant of all bi-colors. Petals are a vivid orient red inside changing to cherry red. Outside chrome to straw yellow. AARS 1949.

\*Denotes All American Rose Selections

**\*HELEN TRAUBEL**—Luminous apricot-pink open to fragrant, warm colored blooms. AARS 1952.

**\*KATHERINE T. MARSHALL** — A lovely bloom of warm, glowing clear pink, heavily textured with a rich, fruity fragrance. AARS 1944.

**\*LOWELL THOMAS** — Rich yellow with petals rolling outward, making magnificent glowing flowers over 4 inches across when fully opened. AARS 1944.

**\*MIRANDY** — Long, ovoid buds of rich maroon-red. Penetrating Damask fragrance. AARS 1945.

**\*MOJAVE**—Radiant orange colored flowers highlighted by flame-like tones of scarlet and vermillion. AARS 1954.

**MRS. P. S. duPONT**—Deep golden yellow slightly lighter with age. Semi-double.

**\*NEW YORKER** — Immense blooms of resplendent scarlet with dark overtones of a rich velvety hue.

**\*PEACE**—Ovoid buds of golden yellow, etched pink, changing to canary yellow, then cream as the pink gradually suffuses the bloom. AARS 1951.

**\*POINSETTIA**—Long pointed buds, glowing fire red. Fine for cutting.

**RED RADIANCE**—Very large; long lasting, intensely fragrant. Of clear, even red color on tall bush.

**SNOWBIRD** — Long pointed buds open into full double, high centered very fragrant snow-white blooms. Compact bushy growth.

**TALISMAN** — A remarkable blending of gold, apricot, yellow, deep pink, and old rose. The rose of many Gold Medals. Popular for cutting.

**\*TIFFANY**—Long pointed buds of deep pink with golden shading at the bottom. AARS 1955.

**\*WHITE KNIGHT** — Magnificent, pure white, satiny rose with blooms 5 inches across. AARS 1958.

## Floribundas

**\*CIRCUS**—Bright yellow and orange urn-shaped buds open to ever-changing tones of yellow, buff, pink and red. AARS 1956.

**\*FASHION**—Rich coral-peach up to 3 inches with 25 petals. AARS 1950.

**FLORADORA** — Vivid orange-red double with 50 petals. Blooms freely and is an eye catcher. A rich and unusual color in roses.

**\*FUSILIER** — Rich orange red of great luminescence which deepens to a bright cherry-red in the fall. AARS 1958.

**\*GOLD CUP**—New all purpose golden yellow. Very fragrant. AARS 1958.

## Climbing Roses

**BLAZE**—Popular spring blooming plant covered with thousands of blazing red flowers. Big, husky and hardy.

**CECILE BRUNNER**—Baby flowered polyanthus. Both the petite buds and fragrant blooms are of dainty pink, shaded salmon.

**CHARLOTTE ARMSTRONG** — The same long tapering buds of the famous bush rose. Finest among the light reds, with flowers opening carmine-red to cerise.

**ETOILE DE HOLLAND**—Brilliant red blooms and richly fragrant.

**PEACE**—Huge cream gold and pink blooms just as lovely and long stemmed as the famous bush plant.

**PICTURE** — Literally hundreds of beautiful, long-stemmed buds and flowers in clear rose pink.

**SUTTER'S GOLD**—A big vigorous plant with long-pointed buds and lovely golden blooms. Very fragrant.

**TALISMAN**—A big spreading plant with the famous Talisman buds and red-gold flowers.

**NEW DAWN**—A wealth of fragrant blush pink roses in spring, and the plant continues blooming until frost.



CHARLOTTE ARMSTRONG AARS

# Rose Garden

**\*GOLDEN SHOWERS** — Pillar and climbing rose exquisitely shaped, daffodil yellow. Fragrant and free-blooming. AARS 1957.

**\*IVORY FASHION**—A sparkling Floribunda set off by a suggestion of yellow in the bud stage and the petals hold very well. AARS 1959.

**\*JIMINY CRICKET**—Dainty tangerine-red buds open to blooms of coral and vermillion, turning to soft apricot-pink. AARS 1955.

**\*RED PINOCCHIO** — New glorious red with lasting fragrance.

**\*SPARTAN** — Burnt orange buds soften to orange-red shaded coral.

**\*STARIFIRE**—Acherry red Grandiflora, blooming both singly and in clusters. AARS 1959

## Grandiflora

**\*BUCCANEER** — Bright non-fading yellow with long, tapering buds on a very tall, erect plant.

**\*CARROUSEL**—Buds and blooms of rich, true red and hybrid tea form and fine long stems.

**\*QUEEN ELIZABETH** — Delicate pure pink, with subtle blending of soft carmine-rose and dawn pink. Tantalizingly fragrant. AARS 1955.

FORTY-NINER  
AARS



GOLD CUP  
AARS



MOJAVE  
AARS





## How to Plant Roses

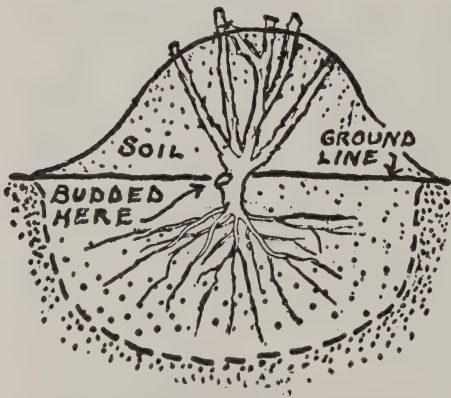
**R**OSES have three essential requirements: food, water and proper planting. It is of utmost importance to meet these requirements. The food should be where the small feeding roots can reach it. Dampness keeps this food in solution, and roots take it up on this form.

The "sandwich" method of preparation is done by removing all soil down to two feet, saving only the top soil. Lay this in the drainage at the bottom, followed by mixed layers of loam and old manure. Don't make the bed more than 5½ feet wide.

As the rose roots will go down 18 inches to 2 feet, the preparation should be at least this deep. Some meticulous rosarians go even deeper.

Proper planting includes the care of the bushes the moment they arrive. A cloudy, windless day is ideal for setting them out. They will come properly root and stem pruned, but if any of the roots has been injured, snip them off above the break. Be careful not to expose small roots to sun and wind.

In planting, dig a hole wide enough and deep enough to accommodate the roots without crowding. Build a cone of soil in the middle of the hole and spread the roots out on each side of it. Pack them well into the earth, then water and pour in more dirt. Tamp down firmly with your feet to keep out air spaces.



The above illustration shows the proper way to plant and hill up a rose bush. Prune back all canes as shown. Dig hole somewhat larger than the spread and depth of roots. Fill in enriched soil around the spread-out roots, keeping the crown barely covered at the finished ground line after tramping. Water thoroughly and hill up 6 to 8 inches of moist soil over top of plant as shown. **THIS IS MOST IMPORTANT.** After growth is well started, wash down this soil mound and remove to proper bed level.

The head point or knob where the rose grows from the understock should be one inch below the

surface. Newly planted roses should be hilled up with soil for two weeks until roots get established.

Remember these important points for successful rose growing:

1. When a quantity of roses arrive and you can't plant them right away, lay them in a trench, being careful to cover the roots with soil.

2. Carry rose bushes for planting in a bucket of muddy water.

3. Since roses are grafted on an understock, set the graft point or head below the surface. Should suckers appear, cut them off.

4. Cultivate a deep top layer of soil. As the roses will go down from 18 inches to 2 feet, your preparation of soil should be at least that deep.

5. Bunched roots result from bad planting. Roots should be spread out on a cone of soil.

6. Winter protection, in cold regions, starts with hilling up the bush with soil—8 to 9 inches. Later, pile leaves around this, with boughs or chicken wire to keep the leaves in place. Before preparing this winter covering, cut back tall hybrid teas, and hybrid perpetuals. Lay climbers down and cover them with leaves or roofing paper.

## How to Divide Perennials

The lifting and dividing of overgrown plants are jobs that are usually done in the autumn when the perennials are nearing their dormancy, but can be done in the spring successfully.

**Summer Phlox**—After five years, clumps of *Phlox paniculata* bear poorer flowers. Lift the whole clump, pull off side pieces, shorten and re-set in fresh soil. Discard the middle part of the clump. The safe distance apart to reset pieces of vigorous perennials is three feet. Excavate the worn-out soil, replace with compost and a slow-acting fertilizer, such as bone meal.

**Columbines**—Although these are apparently fragile plants, well-developed columbines have sturdy roots which can be cut with a knife then torn apart by hand. These columbine divisions can be put directly back into the fresh soil, well-watered and, if the day is sunny, shaded for a time. The excess divisions go into a cold frame to winter over.

**Daisies and Other Perennials**—Most of the daisy types, *Shasta*, *Michaelmas*, are lusty growers but will not continue to flower abundantly unless divided every year. The soil should be enriched and deeply dug for the divisions. Other perennials that often need division are *fall asters*, *herbaceous clematis*, *rudbeckia*, *helianthus*, *yellow coreopsis*, *globe thistles* and *evening primrose*. The sprawling perennials, *aubretia*, *alyssum saxatile* and such, benefit by occasional division and soil renewal.

## How to Plant Shrubs

**W**HEN planting shrubs, make the holes deep and wide enough so that the roots can spread out in their natural positions without being cramped or twisted. Make the planting holes deeper than the ball of roots in order to allow space to throw in some loose soil. This will help the roots take hold. This is true, too, of the width of the hole. This should be wider than the ball of roots to allow ample space for packing freshly worked soil around the ball.

Cut off all bruised or broken parts of the roots, using pruning shears or a sharp knife to make a clean cut.

Deciduous shrubs are planted to the same depth they stood before—deep planting all too often results in failure. However, this is not the case with evergreens, which will do better if they are set from half an inch to an inch deeper than they stood before.

Work the soil firmly around and between the roots; then pack the earth by tramping or using a tamper. Loose soil may cause the roots to dry out before they take hold in the soil. Be careful that no manure or fertilizer touches the roots. When the hole is half filled with soil, water generously; and after the water has been absorbed, finish filling the hole. A saucer of soil around the shrub will be helpful in retaining an adequate amount of water. This saucer should be kept through the first season.

In planting evergreens that require acid soil, growth can be stimulated by putting some peat moss around the roots before filling in with soil. The amount to use will vary from a trowelful to one or more spadefuls depending upon the size of the bush.

Transplanting is a shock to plants, because their food supply is withheld until the roots take hold of the soil and commence to grow. For this reason the most satisfactory time to move deciduous material is in the fall after the leaves have fallen and the

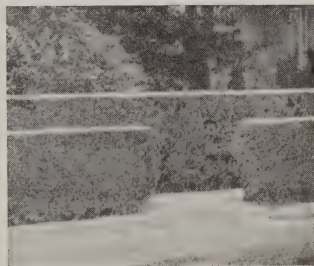
flow of sap is practically at a standstill. If the planting is done in the spring, try to get the shrubs in the soil before the leaf bud enfolds.

When the planting is completed, cut the ends of the shoots back and keep the plants well watered for at least two weeks, or until the shrub is established and the new growth commences.

Watering is especially important in the spring when the warmth of the sun dries out the soil fast. Over-watering of deciduous shrubs in the fall will tend to rot the roots. At that season the soil is damp and cold and after the leaves have fallen, the shrubs are unable to throw off excess moisture. In this respect evergreens differ from deciduous shrubs in that they require copious watering before the ground closes. Their leaves remain green all winter long and are constantly giving off moisture; unless they are given an ample store of water before winter sets in, they will dry out and be winter-killed.

There is no rigid rule for the planting distances between shrubs. The determining factors are the kind of bush, soil and climatic conditions, and whether or not an immediate effect is desired. Generally speaking, the larger shrubs are spaced from five to six feet apart, and the smaller growers can be placed two to three feet apart for mass effect. If the soil is rich and deep and the shrubs are growing satisfactorily, little or no fertilizer will be required. When the soil conditions are poor, as is often the case close to the house, one or two applications of fertilizer will be decidedly advantageous. These can be given in the spring two or three months apart, the first one applied in March.

Spring flowering shrubs should only be pruned immediately after they have finished blooming, as they form their buds at that time for next season's bloom, therefore, if they are pruned too late, a large proportion of the flowering for the following season will be lost.



Privet Hedge for Neat Screening



# Shrubs

Shrubs and trees are the frame, background and foundation for your garden and home. In addition to their decorative value they are a "must" in the outdoor "living room." We have listed below a few of the favorites for every home.



WEIGELA, Eva Rathke

## FLOWERING SHRUBS

**ABELIA** — Exquisite shell-pink blooms all summer. Beautiful, low-growing plants.

**ALMOND, Pink Flowering** — Completely covered with bright flowers, rosy pink and very double in early spring. Makes a rounded bush 3 to 4 feet tall.

**BARBARY, Dwarf Red (Crimson Pigmy)** — Grows 6 to 8 inches in height and 15 to 24 inches across. Ideal for planting in front of larger shrubs. It is slow growing and gives best color if grown in full sun.

**BUDELLIA (Butterfly Bush)**—Blue, red, orchid-lavender of white. All bloom profusely and continuously from early summer to frost. An attractive compact bush 4 feet tall.

**FORSYTHIA (Spring Glory)** — A spectacular bush which bears masses of brilliant yellow florets which literally cover the branches. Canes grow erect with gracefully drooping tips. Very hardy and grows vigorously in ordinary soil. 6-8 feet.

**HYDRANGEA P. G.** — The most striking of all shrubs. Produces huge cone-shaped flowers in August, turning pink then bronze in September.

**JAPAN FLOWERING QUINCE** — Rich spring color for both indoor and outdoor beauty. Covered with masses of semi-double, brilliant scarlet flowers even before the attractive shiny green leaves appear. Quince shaped fragrant fruit makes an excellent jelly or marmalade.

**MOCK ORANGE** — Large, lovely double white flowers in great profusion throughout the summer. Very fragrant.

**SPIREA Van Houttei** — The purest white flowers completely cover the graceful arching branches in spring. Graceful and fragile looking, but extremely hardy. Perfect for specimen planting or a hedge.

**WEIGELA ROSEA**—Completely covered with rosy-pink trumpet shaped flowers in April and May. Beautiful green foliage on graceful branches all summer.

**Broad-Leafed Evergreens**  
**BOXWOOD**—Small, attractive plant that grows very slowly. Foliage is small, glossy and dark green.

**CHERRY LAUREL**—A handsome evergreen that can be grown into a tree or pruned into a specimen. Has dark, shiny leaves.

**EUONYMUS JAPONICA**—A lustrous, glossy-leaved specimen of the broad-leaved family. Grows 6 to 8 feet, but can be trimmed lower.

**EUONYMUS PATENS**—Leaves are a bright green, luxuriant in growth and naturally symmetrical. In the fall has orange, bittersweet berries.

**EUONYMUS PATENS (small leaf)** —An ideal evergreen plant for foundation planting. Can be grown instead of the more expensive Boxwood, and is extremely hardy. Leaves are smaller than regular Euonymus Patens and glossy and richer green.



MOCK ORANGE

## DWARF APPLE TREE



## Dwarf Fruit Trees

**DWARF APPLE TREES** — produce larger fruits than regular apple trees, and bear very young, sometimes a year or two after planting. Several varieties available.

**DWARF PEAR TREES**—Hardly taller than your head. Large fruits and bear young.

**DWARF CHERRY TREES** — These should branch low to the ground, giving you more fruit which can be picked right from the ground. The trees are shapely with good foliage, flowers and fruit.

**DWARF PLUM TREES** — They are less than normal size—almost half and the fruits are large, bearing young. Plant 6 to 8 feet apart.

**EUONYMUS RADICANS** (upright)

—A beautiful new upright growing evergreen. Stems and leaves stay a beautiful dark green all the year.

**NANDINA** — An interesting plant which changes color with the season. Foliage is bright green in summer, turning to vivid red in winter. Clusters of red berries in fall.

**PHOTINIA GLABRA**—Very attractive evergreen that shoots out new growth of brilliant red that resembles a flower.

**PHOTINIA SERRULATA**—A beautiful evergreen with slightly curled, indented leaves. The new foliage in spring is in a contrast of colors.

**PYRACANTHA LALANDI** (Gold Nugget)—Puts on a magnificent display of bell-like snow-white blossoms followed by masses of berries—golden against deep green foliage.



FORSYTHIA, Golden Bell



SPIREA, Van Houtte



FLOWERING ALMOND

**LEATHER-LEAVED VIBURNUM**—

One of the most hardy of all broad-leaved evergreen. Thick, leather-like evergreen foliage; White flowers in May and June followed by clusters of red berries in July and August.

**Hardy Evergreens (Conifers)**

**TAXUS CAPITATA**—Good for corner planting. Ultimate height 12 feet. Dark green yew foliage and beautiful upright pyramidal shape.

**TAXUS CUSPIDATA** (Spreading Yew)—Dark green, deep foliage of spreading habit. Red fruit in the fall.

**TAXUS HICKSI**—A columnar type Yew with branches ascending vertically. A fine plant for entrance and foundation planting.

**MUGLER PINE**—A low, dwarf Pine, growing in a globe shape. Especially good for low foundation planting.

**Low Spreading Type**

**ANDORRA JUNIPER** — Very low and spreading. Beautiful silver green in summer, turning pinkish red throughout the winter.

**TAMARIX JUNIPER**—Low spreading with blue-green foliage which does not fade in winter.

**PFITZER JUNIPER**—The most popular of the spreading type. Very graceful with feathery blue-green foliage. Very hardy.

**Upright Columnar Type  
Evergreens**

**BAKERS' ARBOR — VITAE** — A striking, attractive evergreen that retains its shape without pruning.

**IRISH JUNIPER** — An attractive plant growing in a columnar form that needs no shearing.

**Ornamental and Shade Trees****CHERRY, JAPANESE FLOWERING**

—Large, double dark pink flowers in spring

**CRAB APPLE (Hopa)** — Double flowering, bright rose-red and hardy.

**DOGWOOD, WHITE FLOWERING**

—Beautiful white flowers in spring. Red berries in the fall.

**DOGWOOD, PINK FLOWERING**—

Similar to white with lovely pink flowers.

**PEACH, DOUBLE FLOWERING**—

Red or white, roselike flowers cover the limbs.

**PLUM, RED LEAVED**—Small tree, purplish foliage, pink flowers.

**RED BUD**—A small tree completely covered in spring with clusters of beautiful pink flowers before leafing.

**SILVER MAPLE** — Most rapid grower of all Maples. A large, spreading tree which, at maturity, has a height from 60 to 70 feet. A cut leaf with a silvery cast and also a silvery bark.

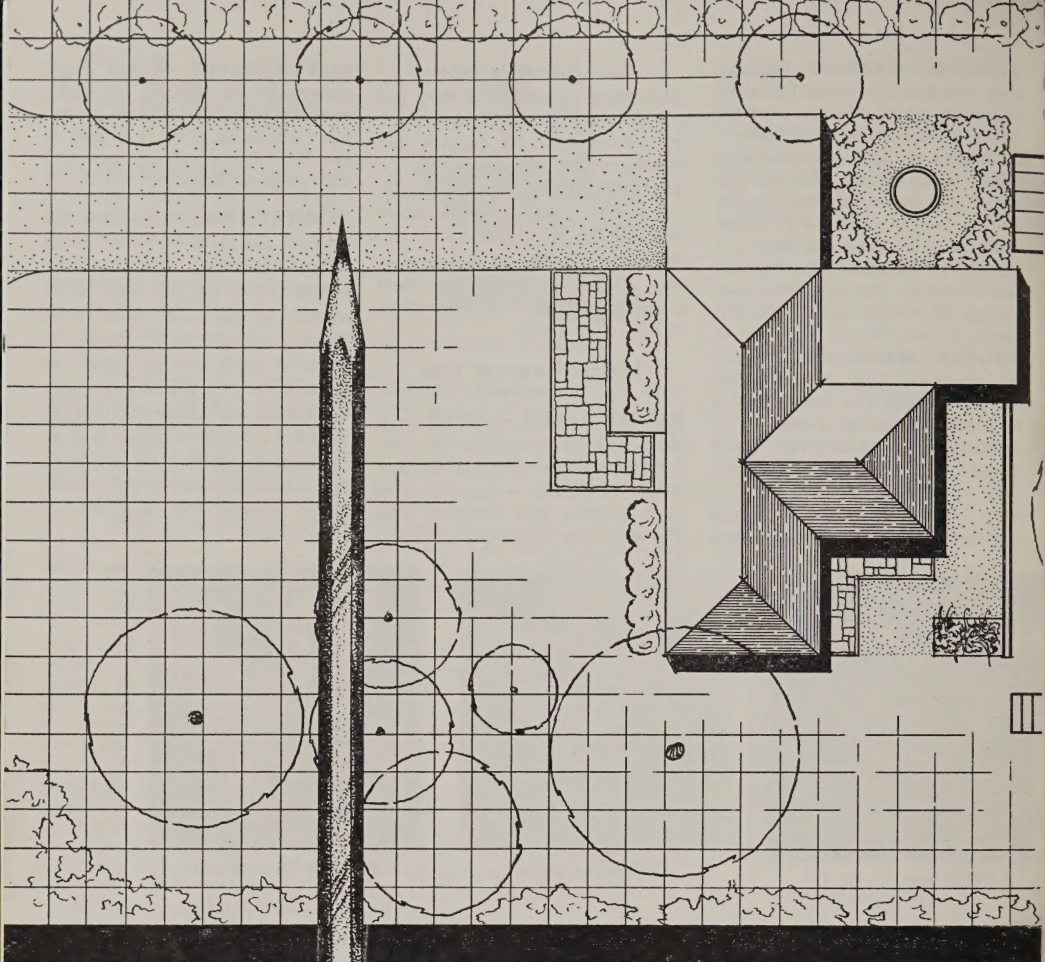
**NORWAY MAPLE** — Best all around shade tree, with dense foliage and rich green colored leaves. Hold on the tree much longer in the fall than most Maples, without much change in color. A good tree for street or lawn specimen plantings, where good form and shade are needed. Reaches a height of 30-50 feet. Is resistant to storm, very clean in habit and the leaves will withstand smoke, soot and attacks from insects.

**GOLDEN RAIN TREE**—This is

one of the best medium sized flowering trees in cultivation. In midsummer the whole tree is a cascade of golden bloom. Golden yellow flowers are borne in long chains—a breath taking sight when they stir in the breeze. Use as a specimen lawn tree which will delight you and your neighbors. Suitable also for planting against walls, corners—any place a flattering floral display is desired. Attains a height of 30 feet.

**PIN OAK**—For an artistic, attractive shade tree, it is one of the fastest growing of the Oak family. The foliage is rich green, deeply cut, glossy copper in late fall. Generally disease and insect free. At maturity stands 30 to 40 feet and grows symmetrically.





**The garden of today is an extension of the home or an "outdoor living room." This means that the garden and outdoor living area must be planned and arranged with as much forethought as designing your home.**

## DESIGN YOUR

We want our outdoor living room to be clean, uncluttered and attractive as well as to achieve more effective garden-keeping with less work.

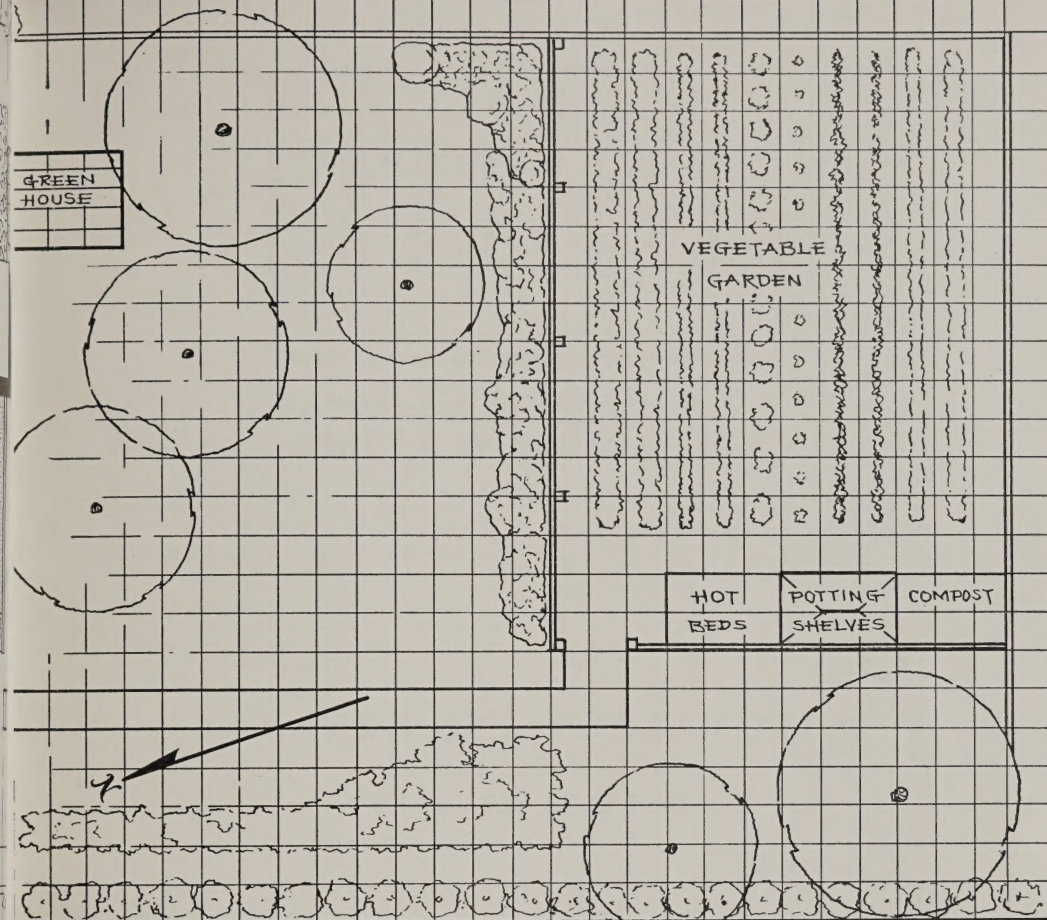
This planning—or replanning is done in several steps.

First—the house should be tied to the garden by doors and terraces. Develop your overall garden plan with different areas which flow into each other rather than being split with hedges, paths and disconnected flower garden which mean more work for the gardener.

You'll want your terrace to be private and protected for leisure living so plant screens of flowering shrubs or hedges—or fencing, if your budget can stand it—on your property line.

Remember that an open lawn is beautiful to look at—and easy to mow.

Overplanting of small home grounds with trees and shrubs is the most common error that can be made. In a few years these plants may interfere not only with the recreational use of the



## PROPERTY THE MODERN WAY

grounds, but by competition for light and root area, they may destroy flower and vegetable gardens and eventually destroy themselves.

You'll want your vegetable garden near the kitchen, where garden-fresh vegetables can be harvested, then cooked before their flavor is lost.

Take your family's interests into consideration when you plan.

A children's play area, space for a badminton court or other similar needs have to be considered in planning.

Garbage clutter can be hidden by a "baffle" made by centering a wood strip on brick wall along your garage. Space wooden poles along the strip and set out hardy vines where they can climb poles of the "baffle."

Upkeep is an important consideration, especially in the areas that get the most wear. In such places, concrete, blacktop or other hard surfacing may be more practical than grass. Avoid odd-shaped grass areas where hand trimming will be required. Also avoid flowerers, shrubs or trees that require

special protection from diseases.

Design your garden with color . . . use effective combinations of perennials and annuals . . . vines and other planting material which you'll find in our catalog.

Take an idea, or a group of ideas, fit them together as you like. It's a quick effective way to better the looks of your home.

Here in our Garden Annual are color combinations, suggested garden plans and ideas all designed to make your "outdoor living room" a welcome spot for your family and friends.



# KELLER'S

## *A Good Name to Remember* **MORE THAN JUST A STORE**

Keller's is more than an ordinary store. Year after year we work hand in hand with the growers of this area—the home gardener, the market gardener and the farmer. All that we have learned from this experience is always available to our customers. So, you see, we don't just sell seed and related merchandise. We furnish local know-how that comes from all this combined experience.

So, whether it's a question of seeds, or insect control, or soil feeding, or equipment—or any of the many divisions of this business—you can always find dependable merchandise here.

**KELLER'S PURE LAWN SEEDS:** High germinating and best quality, chosen especially for use in our area. **Shady Lawn** best for shady spots. **Best Mixture** for the permanent lawn.

**PET SUPPLIES:** A complete line of everything you'll need for your pets. **Dog foods, Remedies, Sweaters, Beds, Supplies, and Toys.**

**VIGORO** for beautiful lawns and gardens, and **ENDO-WEED** to get rid of weeds.

**SUPPLIES:** Garden tools, wheelbarrows. **Easy Wear** garden gloves. Everything you need for the farm or garden.

## **GEO. KELLER AND SONS CO.** **909 Maine Street** **QUINCY, ILLINOIS**

**GARDEN PARTY—All-America 1960**  
Hybrid Tea, rose-flushed yellow.

**SARABANDE—All-America 1960**  
Floribunda, semi-double orient red.

**FIRE KING—All-America 1960**  
Floribunda of brilliant fiery red.

